VERTOV, SNOW, FAROCKI

MACHINE VISION AND THE POSTHUMAN

DAVID TOMAS

BLOOMSBURY

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Introduction

Occasionally one encounters a metaphor that not only captures the essence of an individual practice but also summarizes in a provocative manner the functions and historical significance of a dedicated technology at a specific period in its development. Dziga Vertov's metaphor of kinok eyes spinning like propellers that travel into the future on the wings of hypothesis is a striking example of this type of image. For the metaphor encapsulates the radical spirit and the utopian aspirations of this cinematographer's practice, as well as summarizing, in a remarkably succinct, yet extraordinarily evocative fashion, the experimental character, aesthetic, sociopolitical and revolutionary potential of a new technology (the movie camera) and a new medium (cinema) when used to promote a working interface between cinematic practice and social revolution. The metaphor also serves as a concise introduction to Vertov's *The Man with a Movie Camera*, his most important visual statement on cinema's theoretical and practical capacity to act as an articulate instrument of experimentation and revolutionary change.

The metaphor constructs an equation between technologies (movie camera, airplane), vision (eye), representation (the metaphor itself), perception (eyes spinning like propellors), space, time, and visual method (flying); and it does so in a manner that highlights the eye's—and therefore vision's—technologically grounded and open-ended trajectory through reality, and ultimately history. The metaphor is interesting because of its articulation of biological and mechanical elements (eyes and propellers), space and time (a movement *through* space *toward* the future), and tools for thinking (hypotheses)—the latter articulated/embodied in the eye/propeller /airplane /wings metaphor. This metaphor simultaneously represents the power of thought to construct a representation of itself as an autonomous "intelligence" that can project itself beyond itself by taking the form of a compact, compound image. This image also functions as "tool" of analogical visual thinking and analysis in

the sense that the metaphor doubles as a movie camera and general symbol of technology's abilities to probe the present and future under the sign of "intelligence." The metaphor is therefore more than a simple and brilliant image that captures the spirit of a time. It allows one to think, through its articulation of elements, references, and allusions, about the nature and functions of a technology of representation at any historical juncture where a surfeit of social and cultural contradictions have galvanized human activity and action to the point of radically augmenting the possibilities for change. Moreover, with the hindsight provided by Vertov's *The Man with a Movie Camera*, the metaphor functions as a concise introduction to this film, and its particular model for the political and historical articulation of theory and practice. These claims sound extravagant given the rich history of soviet cinema, but one of this book's objectives is to explore the remarkable characteristics of *The Man with a Movie Camera* and Vertov's Kino-Eye project, and to explain why the film and Vertov's approach to filmmaking are not only pertinent today, but also how they can still serve as references for comparative critical analysis insofar as the metaphor and Vertov's film can be understood to function in the present in *chronotopic* fashion (Bakhtin 1981).

The Man with a Movie Camera was produced by the Russian filmmaker Dziga Vertov in the late 1920s during the "golden age" of the Russian Revolution, one of the most fertile periods of cultural upheaval since the Industrial Revolution. Because of its documentary orientation, political engagement, and commitment to formal experimentation, Vertov's work in general and the *The Man with a Movie Camera* in particular have been seminal influences on the *cinéma vérité* movement, avant-garde experimental filmmaking and it has even influenced contemporary new media artists and theorists (Bard 2007-ongoing; Manovich 2001, 2013). More importantly, Vertov's work has had a decisive influence on politically engaged filmmakers of the caliber of Jean-Luc Godard (Carrol 1972) and Chris Marker (Alter 2006: 135–6).[1] In this book I will be linking Vertov's film with four other works by Michael Snow and Harun Farocki that, in one way or another, extend and transform the approach and issues raised by *The Man with a Movie Camera* within their own historical contexts.

Why is a film, video, or visual artwork considered to be notable from social or cultural viewpoints? What are the characteristics of a prominent *historical* artwork—an artwork, in other words, that has passed into history as an iconic representative of another epoch? Are these characteristics defined by the present and projected into the past, or does the past impose its imperatives on a suitably

"sensitized" present? How are ideas from the past explicitly or indirectly chosen or inconsciously referred to and and *processed* by filmmakers and artists in the present? These questions are not easy to answer because the conditions of film and art production, reception, and appreciation change rapidly and, in addition, have changed radically over the past 20 years (see, for example, Manovich's (2001) appropriation and new media recalibration of Vertov). If each question points to a different answer to the question of a cultural artifact's historical significance (its contemporary *importance*), then one must also take into consideration the new definitional parameters that are constantly imposed on the past (including the immediate past) by the ongoing transformation of manual and intellectual labor through the operations of different historical constraints (politics, economic, social, cultural).

The basic question of an artifact's significance (its cultural "renown") is therefore of considerable political and ideological interest today because of the new socioeconomic and political parameters that have come into play over the past 25 years, and which have influenced values, taste, perceptions, and opinions. Should one choose to ask the question "What is the measure of a film or artwork today?", then the answer will have to be proposed in terms of a specific benchmark. If not, it will not be possible to provide a coherent and informed answer to this question. Finally there is another question that is important to consider today. We live in a society and a period in history where the objectivity and social instrumentality of artifacts including machines is rarely challenged from the "inside"—that is in terms of their internal cultural and symbolic architectures, as opposed to their material construction and form (although construction and form are also subject to cultural and symbolic influences and choices—thus considerably complicating the analysis of an artifact's internal cultural and symbolic architecture). In this book, I will attempt to answer some of these questions through an analysis of *The Man with a Movie Camera*'s socio-anthropological and political functions and its current relevance today as determined through an analysis of Michael Snow's *La Région Centrale* and its companion work *De La*, and Harun Farocki's *Eye/Machine* trilogy and *Counter-Music*. Inversely, I hope to demonstrate how these latter works are, each in their own ways, *The Man with a Movie Camera*'s equal as measured from within their own histories. These works have been chosen because of the different, yet interlocked ways that they address and mark out distinctive stages in a history of machine vision, the machine-based image, and the posthuman. The book is composed of three parts or sections. The first one is devoted to *The Man with a*

Movie Camera, the second to *La Région Centrale* and *De La*, and the final one to Farocki's *Eye/Machine* trilogy and *Counter-Music*.

The Man with a Movie Camera is a film whose highly unusual and multilayered *reflexive* character can be reduced to one basic feature: the diverse ways that its focuses on the question of machine vision, the machine-based image, and their spatiotemporal, sociocultural, and political possibilities. Paradoxically, however, Vertov's film is not only about film as social, cultural, political, material, and perceptual artifact, it is also a film devoted to the exploration of its own spatiotemporal boundaries and characteristics as medium of mass communication. Since it is the product of a machine (the movie camera), it is also a film about the movie camera's mode of seeing the world (its vision): its possibilities and limits. Thus, it can, in these multiple senses—these multiple viewpoints—, also be considered to be a film about filmmaking's material, symbolic, and communicational *place* in society. Because of its multiple boundaries and layers which define the unusual density of its structure, *The Man with a Movie Camera* is also a film that embodies a special model of how a visual work can function as a critical tool of analysis, hyper-reflexive artifact *and* archaeological site of a medium's contributions to society, its development, and memory.

But the *The Man with a Movie Camera* is also unusual in another way. It is a film that is structured as a rite of passage. This structure gives it a particular status in the history of film and it allows one to use it in a fundamentally different way as a basic tool of analysis in relation to other films. The film's ritual characteristics also ensure that it provides a different perspective on how one might discuss the nature and function of media historical works. This structure and its analytical implications are the subject of the first chapter.

If Vertov's films differ fundamentally from those of his great rival Sergei Eisenstein, then this is because of the broad way that they focused on the everyday activities of the inhabitants of Soviet Russia and because of how they critically engaged with these activities in cinematic terms—that is terms of a technology of representation that was the complex product of the kind of socio-industrial environment they were examining. The film deploys its analysis of Soviet society through a simultaneous and unprecedented investigation of the mechanisms and language of cinema. The objective of this exploration was to place the filmmaking activity within this society's industrial economy and to reveal its basic kinship to other modes of production. This wide-ranging focus and its sensitivity to a medium's industrial logic are two of the principal

characteristics of *The Man with a Movie Camera* that set it apart from other films of the period and that ensure its continued relevance today. This is where the question of machine "vision," as explored *and* articulated in this film becomes pertinent. For the purposes of this book machine vision begins with the movie camera and a kinomatic mode of social organization that Vertov proposed in order to exploit its special possibilities. The machine-based image is simply the product of the movie camera. However, its content is the result of the articulation of the camera and a kinomatic mode of social organization. Insofar as the posthuman is concerned, and again for the purposes of this book, I will be enumerating its characteristics as a function of a history of machine vision as it was embodied (Vertov, Snow) or presented (Farocki) in each filmmakers' works. This enumeration will trace its evolution in terms of those works.

However, the importance of Vertov's film and writings is not only to be measured in terms of their "ethnographic" value as products of a period of unparalleled revolutionary change or as potential sources of information on the social construction of vision and its possible relationship to the posthuman. Their ethnographic singularity and richness also resides in the fact that they represent a conscious, indeed reflexive, attempt to socially engineer vision in order that it could function in pace with social and political change. Again, one returns to the fundamental question of the relationship between machine vision, the machine-based image, and their relationship to a concept like the posthuman, since one of the film's recurring key symbols is its celebrated image of the fusion of human eye/movie camera lens, and another key symbol is its equally celebrated stop motion camera/tripod animation sequence, an early protocyborgian image. The fact that *The Man with a Movie Camera* takes the form of a rite of passage makes the film all the more intriguing as cultural artifact and model process of social transformation. This conjunction of singularities—where a film attempts to both record, understand, *and* transform its place in society, culture, and history—ensures that *The Man with a Movie Camera* remains an essential benchmark for visual researchers-practitioners who would like to adopt a similar stance in relation to their historical epoch.

This book is *not* an exhaustive history of Vertov's theories, his practice in general, or even *The Man with a Movie Camera* in particular. Neither is it an exhaustive history or visual analysis of *La Région Centrale*, *De La*, *Eye/Machine I-III*, or *Counter-Music*. It is, in contrast, a book built on a set of questions that are cast in the present and oriented toward the future. The book's ritual frame of reference and the transforming shape of its analysis of a rite of passage

structure and its function in each of the examples discussed are determined by the "anthropological" position it takes in regard to Vertov's practice and his film/manifesto. Establishing this position is the objective of this book's first section and chapter.

In Part II of this book I will be exploring the relationship that can exist in theory and in practice between Vertov's *The Man with a Movie Camera* and Michael Snow's film *La Région Centrale* (1971) and the related video installation *De La* (1969–72). As Annette Michelson noted in a comment that directly links Vertov to Snow (and most of the independent experimental filmmakers of his generation):

> Adopting and expanding the repertory of filmic "anomalies," as Vertov termed them, the independents made use of superimposition, slowed and accelerated action, freeze frames, alternations of color with black and white, conspicuous change of focal length, and the . . . empty frame, among other devices.. . . It was, however, insofar as these "anomalies" were enlisted in the subversion of the perspective constructions which served as models for the construction of cinematic space and its narrative forms that filmmakers implicitly claimed the sovereignty of the spectator. The hallucinated viewer was, so to speak, replaced by the cognitive viewer, but common to them both was the status of the transcendental subject. (Michelson 1979: 116)

This filiation leads to a comparison of *La Région Centrale* and Vertov's film, including their differing rites of passage structures and contributions to a history of machine vision and its posthuman affiliations and functions.

I will demonstrate how *La Région Centrale* and *De La* systemically augmented and extended different kinds of visual/cognitive experiences by linking and integrating basic yet diverging machine-based processes of visualization (remote controlled recorded imagery versus remote controlled real time-based video image production). My point of departure for this discussion will be an extended analysis of Snow's 1971 film *La Région Centrale* because *De La*'s camera mechanism was originally designed for this film and it served as the technological mechanism and medium for its production. Moreover, since *La Région Centrale* shares a common medium (film) with *The Man with a Movie Camera*, it will not only be possible to create a common bridge between Vertov's film and *De La*, by way of Snow's film, but it will be possible to use this common mechanism to measure the similarities and differences that exist between these two distinct works. This discussion will provide the introduction to the book's

final section which deals with Farocki's video works and their contribution to the history of machine vision, the machine-based image, and the posthuman as laid out in the previous sections.

One of this book's objectives is to trace a history of the posthuman in relation to each of the examples I have chosen to discuss. The title *La Région Centrale* points to the film's absent center, to the location of its "camera activating machine" (Snow's term) and therefore to the film's origins in a geographically located and deployed machine vision. It is this mechanism which is placed at the center of *De La* thereby exposing it to the spectator's gaze. *De La* points back to what is absent in *La Région Centrale*: its part programmed, part human stimulated camera activating system. I will be arguing that the camera activating machine, which is common to both works, is not only a sophisticated remote controlled tripod (an important historical and theoretical link with *The Man with a Movie Camera*), but that the machine's absence and presence in these two works mark two stages and two sets of possibilities in the history of machine vision. What sets these works apart is not only the fact that they used film or video, but also how they exploited the possibilities of the camera *tripod* in order to transform the experience of the moving image and how they used a new form of tripod to explore and expand the boundaries of the human experience of machine-based vision and through this expansion to propose transitional posthuman models of consciousness and machine-based identity for human consumption. These models are anticipated in *The Man with a Movie Camera*'s presentation of the mechanics, possibilities, and phenomenology of camera-based vision. Snow's remote controlled camera activating machine (or semiautomatic tripod head) is anticipated in *The Man with a Movie Camera*'s stop motion tripod/camera animation and the camera activating machine's method of processing visual information refers backward to *The Man with a Movie Camera*'s key eye/machine eye symbols and forward to the themes discussed in *Eye/Machine I-III* and *Counter-Music*. However, *La Région Centrale* and *De La* are clearly the products of another chapter in a Western sociopolitical and cultural history and stage in the development of machine vision.

The strategy that I will adopt in Part II is different from the one employed in Part I. Instead of beginning with a rite of passage analysis of *La Région Centrale* and *De La*, I will proceed with a detailed examination of issues implicated in *La Région Centrale*'s production and, in particular, its reception. The focus on reception and its links to film production and structure were not only determined by the amount and quality of archival and secondary material

that was available, but also by the unique characteristics of Snow's film and sculptural video installation. These sources shed considerable light on how early commentators experienced the film, how they talked about it, and how they related their experience to its visual structure. An alternative picture of *La Région Centrale*'s rite of passage structure and function emerges when these testimonies are correlated with technical and methodological information obtained from Snow's files and other sources. This picture can serve, I will demonstrate, to articulate *De La*'s *dislocational* rite of passage relationship with *The Man with a Movie Camera* and *La Région Centrale* and their differing positions in a history of machine vision and the machine-based image. In addition to differences in media, visual structure, and spectator experience, there is also the real time, video-based rite of passage's impact on the specific model of posthuman identity that is implicated in *La Région Centrale* and that *De La* exposes for public scrutiny and consumption.

Part III is constructed in a slightly different manner from the earlier two sections. Instead of analyzing Farocki's *Eye/Machine* trilogy and *Counter-Music* as internally constituted rites of passage, I will treat *Eye/Machine* I-III as a three-part rite of passage and *Counter-Music* as a final meta-commentary on Vertov's and Snow's films and Farocki's trilogy because it not only explicity refers back to *The Man with a Movie Camera* and therefore closes the loop of analysis that defines this book and its limits, it also provides interesting evidence of the nature of humanity's reincorporation into a new posthuman condition from an institutionalized viewpoint. The significance of Farocki's *Eye/Machine* trilogy and *Counter Music*, in the context of this book, is that they explore and map an important threshold in the machine-based automation of vision *within a specific Vertovian lineage*, and they also point to a new stage in the evolution of machine vision and a posthuman subject, a stage whose primary characteristic is that machines can function exclusively in terms of their own systems and languages and therefore without the intermediary of human agents. This brings me to two important points of clarification. The definitions of machine vision and the posthuman that function implicitly throughout this book and which I have already alluded to.

By machine vision I simply mean, in the context of this book and *as a point of departure and basic reference*, the visioning process that is operating in the case of a machine like a movie camera *when it is used to produce a film*. Insofar as this process is rendered visible to public scrutiny in such products as photographs and films, machine vision is not simply a product of the machine itself. It is, in

the first place, a product of the machine's structure, which includes its optics, the recording material used, its operating parameters, and its size. Machine vision is, in addition, determined by the complex *use* of the movie camera under particular circumstances, as we shall see in the cases of the films discussed in this book. They can include precise clearly defined sociopolitical, cultural, and/or aesthetic objectives and physical/environmental circumstances. But it is also a product, as this book demonstrates, of a ritual process, a system of classification, and other symbolic attributes that are built into the machine, the process of producing films and a film's final form and content. There are instances, as in the case of Vertov's Kino-Eye mode of observation/manufacture, when machine vision is the product of the machine and a specific mode of social organization. It is in these multiple senses that machine vision has been defined and used in this book. This brings me back to the question of the posthuman and its relationship to machine vision.

In her influential book, *How We Became Posthuman*, Hayles has defined the posthuman in the following terms:

> What is the posthuman? Think of it as a point of view characterized by the following assumptions. (I do not mean this list to be exclusive or definitive. Rather, it names elements found at a variety of sites. It is meant to be suggestive rather than prescriptive.) First, the posthuman view privileges informational pattern over material instantiation, so that embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life. Second, the posthuman view considers consciousness, regarded as the seat of human identity in the Western tradition long before Descartes thought he was a mind thinking, as an epiphenomenon, as an evolutionary upstart trying to claim that it is the whole show when in actuality it is only a minor sideshow. Third, the posthuman view thinks of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born. Fourth, and most important, by these and other means, the posthuman view configures human being so that it can be seamlessly articulated with intelligent machines. In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals. (Hayles 1999: 2–3)

As Hayles notes her parameters are assumptions and suggestive. They are implicit in an academic posthuman habitus, but they provide little guidance in elucidating its material foundations, concrete cultural logic, or precise anthropological

status and identity in specific cases such as the ones under consideration. As I noted earlier, I will be treating the posthuman as a specific product of a history of machine vision that takes shape through specific films *whose structures and symbolic logics are governed by a rite of passage*. Thus, as I hope to demonstrate, the posthuman will be defined, in each case, as a function of how a film or video installation has eclipsed or processually rearticulated the human body, its identity, and subjectivity in terms of their machine-based visions (and models) of the world.

This book would not have been written without the help of a number of people. I would like to thank, in the first place, Michael Snow for his generosity in answering a range of questions about *La Région Centrale* and *De La* over the years since this project was undertaken, answers that were invaluable in developing a comprehensive understanding of *La Région Centrale*, *De La* and their relationship to *The Man with a Movie Camera*, Farocki's *Eye/Machine* trilogy and *Counter-Music*. I would like to also thank John Locke for a conversation we had about his 1973 articles on *La Région Centrale*, for the personal material he made available to me and for the quotations he allowed me to use. Pierre Abbeloos granted me an interview which provided background information and insights into the construction of Michael Snow's camera activating machine, for which I am grateful. Finally, I would like to thank Sophie Bellissent, Sophie Bélair-Clément, Francine Delorme, Rosika Desnoyer, Catherine Lescarbeau, and Kesso Line Saulnier for their assistance in collecting material, Olya Zarapina for a Russian translation, and Briana Bray and Guillaume Clermont for their work on the illustrations and in the latter case for his work on formatting the bibliography. Access was granted to archival material at the Art Gallery of Ontario and the National Gallery of Canada. I would like to thank Cyndie Campbell, Ainsley Walton, and Raven Amiro of the National Gallery of Canada, and Felicia Cukier and Koreen Blythe of the Art Gallery of Ontario for their kindness and diligence in facilitating my research. Matthias Rajmann generously provided me with reproduction stills on behalf of Harun Farocki. Finally, I would like to thank Eva Kolcze of the Canadian Filmmakers Distribution Center for the loan of a *La Région Centrale* viewing print, and Emmet Henchley and René Daigle of the Mel Hoppenheim School of Cinema, Concordia University, for providing the means to view it.

The origin of this book resides in an earlier version of Chapter 1 first presented at the "Film as Ethnography" conference, University of Manchester in September 1990. It was subsequently published in *Visual Anthropology*

Review, 8–2, 1992, and republished in Lucien Taylor, ed., *Visualizing Theory: Selected Essays from V.A.R., 1990–1994* (New York and London: Routledge, 1996). Portions of Chapters 6 and 7 were tested out in the context of a research group that I participated in which eventually led to the publication, in 2007, of an experimental powerpoint-based analysis entitled "Notes on the Relationship between an Automatic Narrative and its Mechanical Logic: Dziga Vertov's *The Man with a Movie Camera* and Michael Snow's *De La* (1969–1972)." I would like to thank the members of the group for discussions, comments, and companionship during the group's existence.

An earlier version of Chapter 8 was published in *Harun Farocki. One Image Doesn't Take the Place of the Previous One,* ed. M. Thériault (Montreal: Leonard & Bina Ellen Art Gallery). Finally, I would like to thank Nina Fu and Michèle for putting up with various piles of books and papers that stealthily "displaced themselves" throughout the house over the past few years.

Part I

Threshold

When a Ritual Process Speaks of Machine Vision and Cyborg Prototypes: A Film Document, Circa 1929

Our eyes, spinning like propellers, take off into the future on the wings of hypothesis.

Dziga Vertov

1

Manufacturing Vision and the Posthuman Circa 1929: Kino-Eye, *The Man with a Movie Camera*, and the Perceptual Reconstruction of Social Identity

The Man with a Movie Camera (*Chelovek s kinoapparatom*), a six-reel silent film, was released in 1929 under the auspices of the Ukrainian Film and Photography Administration (VUFKU). As credited on the film, Vertov was the "author-supervisor of the experiment," Elizaveta Svilova, his wife, the editor or montage assistant, and his brother, Mikhail Kaufman, the chief cameraman.[1] Vertov considered the film to be a major statement of the "Kinoks" principles of nonfiction filmmaking which would oppose a *kinomatic* world—a world as seen and reproduced by Vertov's new mode of cinematographic observation/manufacture, christened "Kino-Eye"—to the world as seen by the imperfect human eye.[2] *The Man with a Movie Camera* was Vertov's most ambitious visual statement of Kino-Eye method—not only "a practical result" but also, and most importantly, "a theoretical manifestation on the screen" (Vertov "The Man with a Movie Camera" (1928), 1984: 83).[3] Finally, in keeping with its artifactual status as manufactured object, it was also considered a "film-object" (1984: 83). Moreover, Vertov adopted an unusual strategy of setting the parameters of *The Man with a Movie Camera*'s reception by proclaiming in its short, polemical on-screen introductory manifesto that it should be treated as both a theoretical and practical statement of film method. In doing so, he redirected the film's function away from fictionally based entertainment toward a didactic educational purpose of promoting precise sociopolitical objectives (framed by a Soviet political and ideological program) based on a reflexive analysis of film production's place in a world animated by industrial processes and systems of transportation/communication.

Annette Michelson has described the *The Man with a Movie Camera* as a "meta-cinematic celebration of filmmaking as a mode of production and . . . a mode of epistemological inquiry" in which a "'world of naked truth' is, in fact, the space upon which epistemological inquiry and the cinematic consciousness converge in dialectical mimesis" (1990: 19, 1972: 63). This space, whose specific social topography remains unexplored in this cogent description of the film's unique revolutionary status, is, perhaps, best defined in its own terms, namely, as a new product of a social/observational system of manufacture that was designed specifically and purely for *kinomatic* (Kino-Eye based) communication with all that this implied from political/formal viewpoints. It was, accordingly, a product, but also manifesto and manual for producing films based on a hierarchic division of observational labor that functioned as a social technology for *manufacturing* kinomatic forms of knowledge. It is this social technology which articulates the complex thematic armature consisting of a day in the life of the compositely constructed Soviet city depicted in *The Man with a Movie Camera*; and it is this technology that provides the basic material (film footage) for the construction of a visual channel (or kinomatic route) to achieve one of the film's principal educational objectives: a perceptually induced revolutionary conversion of the *consciousnesses* of both producers *and* spectator/audience; a strategy of conversion that was based on a "communist decoding of the world" (Vertov "The Essence of Kino-Eye" (1925), 1984: 50). Finally, it is this technology that also embodied an ethnographic-like analysis of its own conditions of historical existence insofar as they were "exposed" in terms of a finely calibrated self-consciousness of the (the film's) social, economic, and political integration in an industrial society.

However, *The Man with a Movie Camera* achieved this objective in a curious way for such an avowedly revolutionary visual experience. The film's structure replicates in its overall organization and transformative social function the tripartite symbolic architecture of a traditional rite of passage ceremony. Although there is no evidence to suggest that Vertov was aware of the sociocultural significance of this type of ritual, he was certainly aware of the existence of similar rituals in his society: he did depict socially sensitive events such as birth, marriage, and death that are widely subject to rites of passage mediation in many societies in his film.[4] *The Man with a Movie Camera* presented these ritually mediated social events in a new way since they were portrayed as taking place under the aegis of a new revolutionary sociocultural agenda, and through a cinematic medium of representation where old and new were critically juxtaposed and where socially

sensitive events were often promoted in a new light (expedited civil marriage and divorce procedures) or associated with traditional prerevolutionary customs and systems of belief (private forms of bereavement). However, while Vertov's film clearly presented its juxtapositions and associations through the optic of its own revolutionary agenda and the distinctive spatiotemporal characteristics and perceptual dictates of its cinematic language, its structure mimics a rite of passage ritual, and this is where the particular "anthropological" interest of the film lies. For this structure allows one to analyze the film in a different way and it also provides a panhuman frame of reference for new questions concerning its logic, function, and symbolic content which complicates, in a significant way, the reading of its revolutionary content and objectives. Moreover, insofar as *The Man with a Movie Camera* is predicated on this ritual structure, it sensitizes the viewer to the existence of similar processes and functions in other films, notably in Snow's *La Region Centrale* and *De La* and, in a different form, in Farocki's *Eye/Machine* trilogy and *Counter-Music*.

There has been no systemic attempt to examine *The Man with a Movie Camera* from a more general "anthropological" point of view, that is, as a *social symbolic* product of a particular society, culture, historical epoch, and, in Vertov's case, revolutionary political agenda.[5] This is surprising, since his work has dual ethnographic value. First, as a contemporary record of the vision, issues, stakes, and methodologies that were implicated in the development of a new kind of society. Second, as the product of a new method of looking and recording (movie camera) and an innovative way of seeking out, organizing, and presenting the visual images produced by movie cameras (Kino-Eye, montage editing). When coupled with the fact that *The Man with a Movie Camera*'s basic structure corresponds to the tripartite organization of a rite of passage ritual, these ethnographic characteristics place the film in a unique sociohistorical position, not only as a politically grounded cultural document but also as a specifically crafted technologically based symbolic process. But this is not all. Since the film also shares common symbolic properties and functions with other ritual processes that mediate essential events of a transitional sociobiological and cosmic nature such as birth, marriage, and death, as well as important seasonal and cosmic transitions that are associated with the planting and harvesting of crops, its structure raises questions about the relationship between its panhuman status and its specifically engineered sociopolitical objectives. *The Man with a Movie Camera* is, in other words, the individual product of a collective revolutionary agenda that has been cast in a collective ritual form.

However, given the material nature, sociocultural and political content of the film, it is clear that the transition it mediates is very different from a traditional rite of passage, and this is where the particular interest of the film and Vertov's practice lie. For death, birth and natural cycles are articulated through the film's structure and language with prerevolutionary social models, and the "birth" of a Soviet consciousness rooted in a progressive Soviet society whose industrial and technological trajectory of development would ultimately, in the context of Vertov's Kino-Eye theory, take it beyond the world of natural forces and cycles of human existence. This ritualized cycle of death and birth involved the filmmaker and kinoks, who were also subject to the film's process of transformation and who could also emerge as more mature and refined (knowledgeable and sophisticated) revolutionary products (practitioners). Thus as an audience "lived" through the process of transformation, that the film proposed, they would also realize that they were watching the product of a group of people who had already passed through a similar process. These unusual characteristics pointed to *The Man with a Movie Camera*'s unique capacity to function as a visual model to produce unconventional (experimental) ritually based sociopolitically informed practices and counter-practices (in the case of its comparative analysis of residual bourgeois behavior). For here was a film—a visual *work*—that operated in a significantly different fashion from other films when considered from the viewpoint of its thematic content, visual structure, sociopolitical ambitions and ritual functions; and this is where its significance as a historical reference and model for contemporary visual practices lies, even though the historical, political, economic, institutional, and artistic conditions for the production of visual works of this kind have mutated to the extent that they might no longer be feasible in Vertov's terms.

The Man with a Movie Camera continues to serve as an example of a work that prioritizes method and historical reflexivity. In other words, the necessity of addressing the conditions of its own historico-political existence over the seductive pleasures of "entertainment"—what Vertov understood as standardized forms of fiction that were devoid of critical social content. It is precisely the overdeterminism of *The Man with a Movie Camera*'s historical "message," its utopian political and technological ambitions, its historical failure and therefore the impossibility of attaining those ambitions, and yet its clairvoyance in regard to the kind of society that they could lead to, that makes the film so important as ethnographic document, and reference for a visual practice. If this kind of film is no longer possible, because of technological and political transformations

that have displaced its principal axis of historical reference, then it is important to keep its example and lessons (both positive and negative) in mind, and to use it as a reference in a search for counter-practices and alternative models of human visual activity *that can be imagined into practical existence* under current sociocultural and economic regimes. One particularly important, politically and socially ambivalent path of human development has taken place by way of machine vision and its relationship to the posthuman, a relationship that *The Man with a Movie Camera* addressed in an unprecedented and spectacularly clairvoyant fashion.

What are *The Man with a Movie Camera*'s rite of passage characteristics? In the following pages, I will present a case for considering film and photography as rites of passages. I will analysis *The Man with a Movie Camera*'s rite of passage features. I will then explore the novel "social technology of observation" that served as the film's foundation and, finally, I will describe how this rite of passage and its technology of observation are implicated in the production of new social identities, in particular a prototype for a collective posthuman identity. During the course of this discussion, I will have occasion to comment on some possibilities and questions that are raised by this anthropological approach to Vertov's kinomatic theory and practice. This chapter will then serve as a frame of reference for the subsequent analyses of *La Region Centrale* and *De La* in Chapters 2–7; while the question of surveillance and the posthuman raised by Snow's and Vertov's films will serve as frames of reference for a final discussion of Farocki's *Eye/Machine* trilogy and his *Counter-Music*.

Photographic and cinematic rites of passage

i) What is a rite of passage?

Rites of passage ceremonies are dedicated socio-symbolic passageways for the movement of human beings and groups of human beings between distinct social categories or stages where these movements are considered, from a social point of view, to be dangerous, traumatic, or destabilizing because they represent situations or conditions of transient existence that are "in between" and therefore "outside" of existing social structures. These rites are most often linked to the symbolic mediation of such socially problematic and ambiguous biological processes as birth, puberty, and death.[6] They have also been associated with major seasonal or cosmic transitions and important social events such

as marriage. Processually structured, institutionally mediated educational programs such as one finds in universities, whose disciplines are dedicated to producing specialized, socially productive adult members of a society, are key examples of a powerful contemporary rite of passage. In one way or another, collective education and its transformative impact on the individual is at the heart of such ritual processes.

Rites of passage are normally composed of three distinct zones of ritual/symbolic activity: a rite of separation, a liminal stage, and a rite of reincorporation. Each zone of activity is devoted to precise transformations and objectives such as the separation of an individual (also known as an "initiand") from normal social activity, his/her introduction to the body of knowledge, symbolic processes and activities that the rite of passage is engaged with (in terms of its specific social mandate), and the initiand's reintroduction into society in his or her new state and/or stage of social existence. The initiand passes through these zones and is subject to physical and/or symbolic manipulation and transformation in each of them. In traditional rites of passage rituals, these operations and procedures can take the form of cleansing rites, physical ordeals, marking such as tattooing and scarification, or various kinds of surgical interventions such as male or female circumcision that are used to physically alter the body in order that it bears visible attributes of a new collectively acknowledged social condition, status, or rank. They can also include a stage of symbolic death. The presentation of "secret" knowledge about an initiand's new conditions of social existence (manhood or womanhood) or functions (warrior) can also take place during these rites, in particular during the liminal stage (Richards 1956; Turner 1977). The ritual process is designed to "transport" the initiand from one social position (adolescent/pubescent) to another (woman/man, warrior, married) or condition of existence (life) to another bodily state (death) through a collective process of socio-symbolic and physical manipulation/transformation. The British anthropologist Edmund Leach published a schema of the ritual's basic structure that conveniently displayed its transformative logic and its elementary relationship to social space and time (Leach 1976: 78). Figure 1.1, which is based on Leach's original, has been modified in order to present the various synonyms that have been used to identify the ritual process' three stages.

The schema demonstrates how the rite of passage's stages are structured in relation to a tripartite *spatiotemporal* logic and it illustrates how this logic is at the basis of the separation of social beings from society and their reintroduction back into society. As this diagram suggests, the central portion of the ritual is

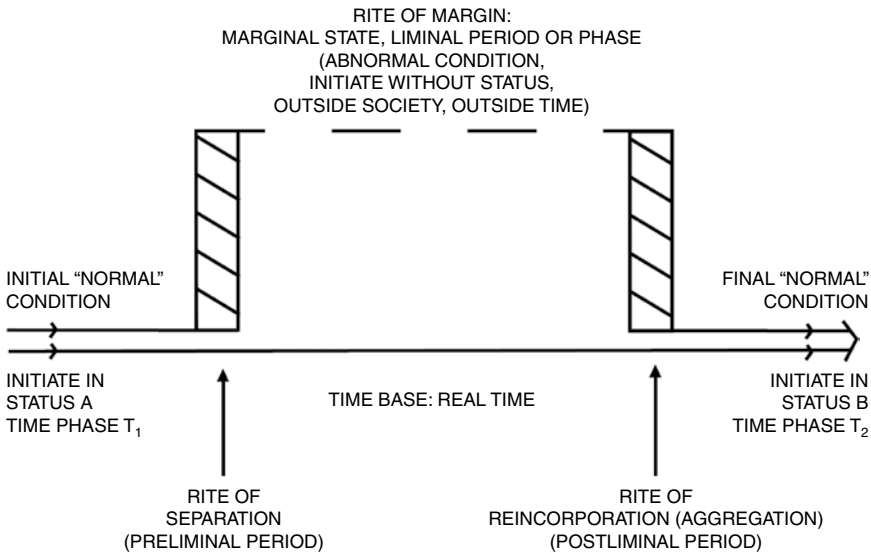

Figure 1.1 A rite of passage's basic spatiotemporal structure.

Source: Based on a diagram in Leach (1976: 78).

designed to maintain the initiand in a condition of existence that is most often considered to be "outside" of society. This condition can be represented by the initiand's spatial removal from a specific physical location such as a family house or village.[7] Sometimes the initiand is considered to be in a condition of death in relation to his/her previous state of social existence, a simulation that is nevertheless considered to be ontologically "real" (Turner 1970: 97). The objective of this pivotal stage is to transform the initiand and to prepare him/her for "rebirth" into society as a new member who is now "ontologically" defined by his/her new condition of social existence. The initiand is habitually introduced to specialized knowledge that is not readily available to other members of society (women/men) whose "statuses" are governed by an earlier phase of social existence. The knowledge is status specific and can relate to a society's/culture's basic structure, logic, or symbolic matrix, its history and place in the world or the cosmos, as well as information on customs and behavior—such details being defined by the rite of passage's function. The ritual's objective at this point is to introduce an initiand to information or a narrative that allows for the clear comprehension of a new social relationship and function.[8]

Finally, rites of passage can be spatiotemporally homogeneous, as exemplified by the symbolic and spatial compactness of a conventional marriage ceremony

which takes place within a church (although the rite of passage clearly begins with an act of betrothal—symbolized by the gift/display of an engagement ring in some societies—which traditionally is a sign/condition of initial/provisional separation from a pool of unmarried and therefore eligible men and women). Alternatively, it can be spatially/temporally fragmented over a large geographic area and it can take place over homogeneous or heterogeneous periods of time that can extend over days as in the case of harvest festivals, to months or years (in the case of university education).[9] Since these ritual processes were originally analyzed in the context of preindustrial societies, they have most often been associated with them; and when they have been identified in industrial societies, they have most often excluded scientific and technological processes because of their relationship with "objective" bodies of knowledge and disciplines such as mathematics, engineering, physics, and chemistry etc.

ii) The photographic rite of passage

Rites of passage analyses have traditionally not encompassed technological and industrial processes because they were not considered to be symbolic processes and they did not appear to exhibit a structure or function that operated according to a ritually based pattern of transformation. This point of view extended to photography and cinematography, notwithstanding the obvious socio-symbolic statuses of their products (photographs and films). However, there are two reasons why these methods of image production should have been considered to function as rites of passage. First, they are powerful semi-automatic systems of optical mechanical and chemical transformation that can be treated as processes of *transubstantiation*. These systems operate as clearly structured, technically regulated spatiotemporal passages between the world of everyday human existence and a parallel world of pictorial representation. The efficiency of these mass-produced systems that are, in turn, able to mass produce visual images and the ubiquity of their use in the modern world suggests that they might represent portals between major collective states or stages. Such stages are not only defined in terms of the efficient transmission of visual information (of an optical, chemical, or, since the 1980s, electronic nature), they are predicated on a new method of transportation that is based on the translation of visual data between different space-time dimensions.[10] Second, these systems are, in fact, structured according to three clearly demarcated or differentiated stages of production that replicate, in important ways, the governing tripartite

structure and corresponding symbolic logic of a classic rite of passage ritual. The three major optical and chemical stages in the production of a standard photochemically processed photograph (since this chapter focuses on pre-digital processes of mass image production) correspond to the important material/symbolic transformations of the image in a basic photographic rite of passage ritual (see Figure 1.2).

The first stage, or rite of separation, of an ideal photochemically based rite of passage consists of the optical/mechanical procedures and photochemical reactions involved in physically registering light that has passed through a photographic lens, or related aperture, on a photosensitive film or other photosensitive support within a dark environment (such as a camera obscura or conventional camera). The product of this stage (a latent image) is then chemically processed to produce a stable negative, which corresponds to the second, marginal or liminal stage of a photographic rite of passage.

The negative is an exemplary liminal artifact, a strange and uncanny social object in which light and dark—the basic ingredients of an ocularcentric classification system and the constituent elements of cosmic socio-symbolic classification systems composed of light/dark and day/night—are reversed, while a subject/image retains its given "morphological" characteristics. The negative is also unusual and unique, in its most common form, in that its transparency provides the potential for unlimited reproduction.

The third stage of an ideal photographic rite of passage, which corresponds to a rite of reincorporation, comprises the optical, mechanical, and chemical procedures used for processing and printing a positive image. These procedures ensure an orderly transformation or passage from the liminal stage to a final

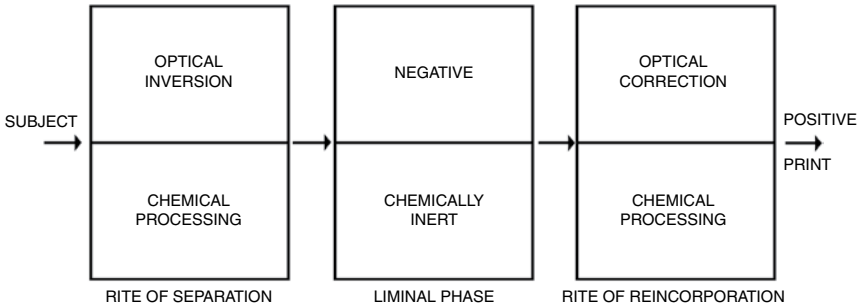

Figure 1.2 The optical and chemical logic of a basic photographic rite of passage.
Source: Based on a diagram in Tomas (1982: 18).

"positive" stage and socio-symbolic-material condition *represented* by a chemically "stable" photographic print. This print is subject to different physical and sociocultural rules and regulations concerning its collective and private uses and functions (Bourdieu et al. 1990).

Another way to trace the correspondence between a rite of passage ritual and the photographic process is through the latter's basic system of symbolic permutations as articulated through the three principal phases in the production of a conventional photograph. The photographic process is also a sequence of photochemical reactions that function as a series symbolic permutations based on the transformational possibilities of a semiotic matrix composed of light/darkness, presence/absence, sight/non-sight, and day/night. This matrix is at the symbolic—cosmic and mythic—foundations of the social worlds that human beings have collectively constructed together. Photography engages with, activates, and articulates this matrix and its symbolic content through its transformation of a three-dimensional subject (a concrete presence) into a two-dimensional image (the absent "presence" of that concrete presence) each time an optical image is chemically transformed into a photograph (see Figure 1.3).

The complete cycle of optical/mechanical and symbolic transformations can be presented in the form of a different arrangement that maps a photographic rite of passage's relationship to social space and time (see Figure 1.4). The illustration's metaphoric bridge-like form (extrapolated from Leach's 1976 diagram) allows one to conveniently visualize the way that two socially recognized stages are articulated in terms of a third stage that exists outside of social space and time. It also visually summarizes how the photographic process functions as a parallel passageway or channel between stages. The diagram illustrates the relationship between social and symbolic time and it describes the nature of the latter's special relationship with the former. As in the case of a bridge, the photographic process spans—or acknowledges—a (sociocultural) void: an absence created by the temporary extraction of the initiand from the social matrix. However, in the case of photography this absence is defined or "represented" (depending on one's viewpoint) by an *image*, as opposed to the dis-/re-location of a physical body in a conventional rite of passage. This "materiality" of the image (its latent or negative photochemical "footprint") is processed by photochemical transformations that operate in a parallel (ritual) space even when the space is clearly identifiable and precisely locatable in a geographic or other specialized environment (such as the place in which the photograph was taken or a darkroom).

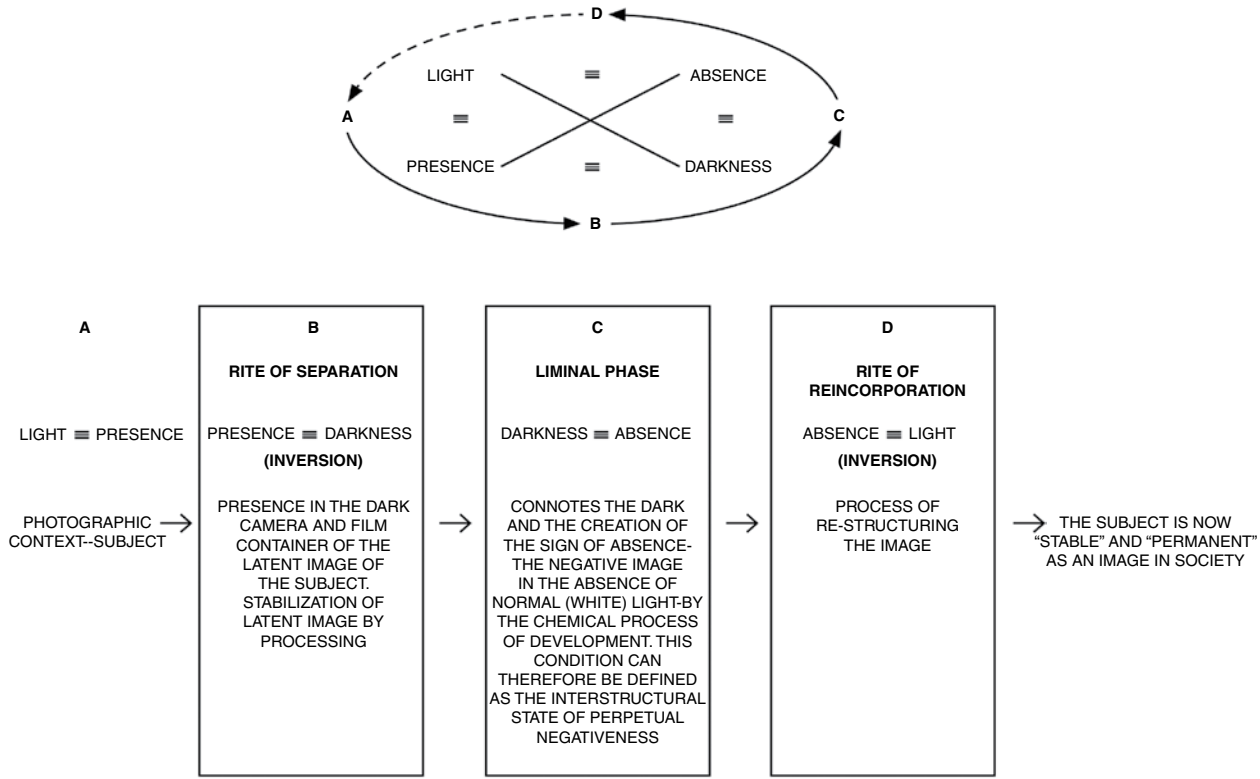

Figure 1.3 The symbolic operations performed by a basic photographic rite of passage.

Source: Based on a diagram in Tomas (1983: 14).

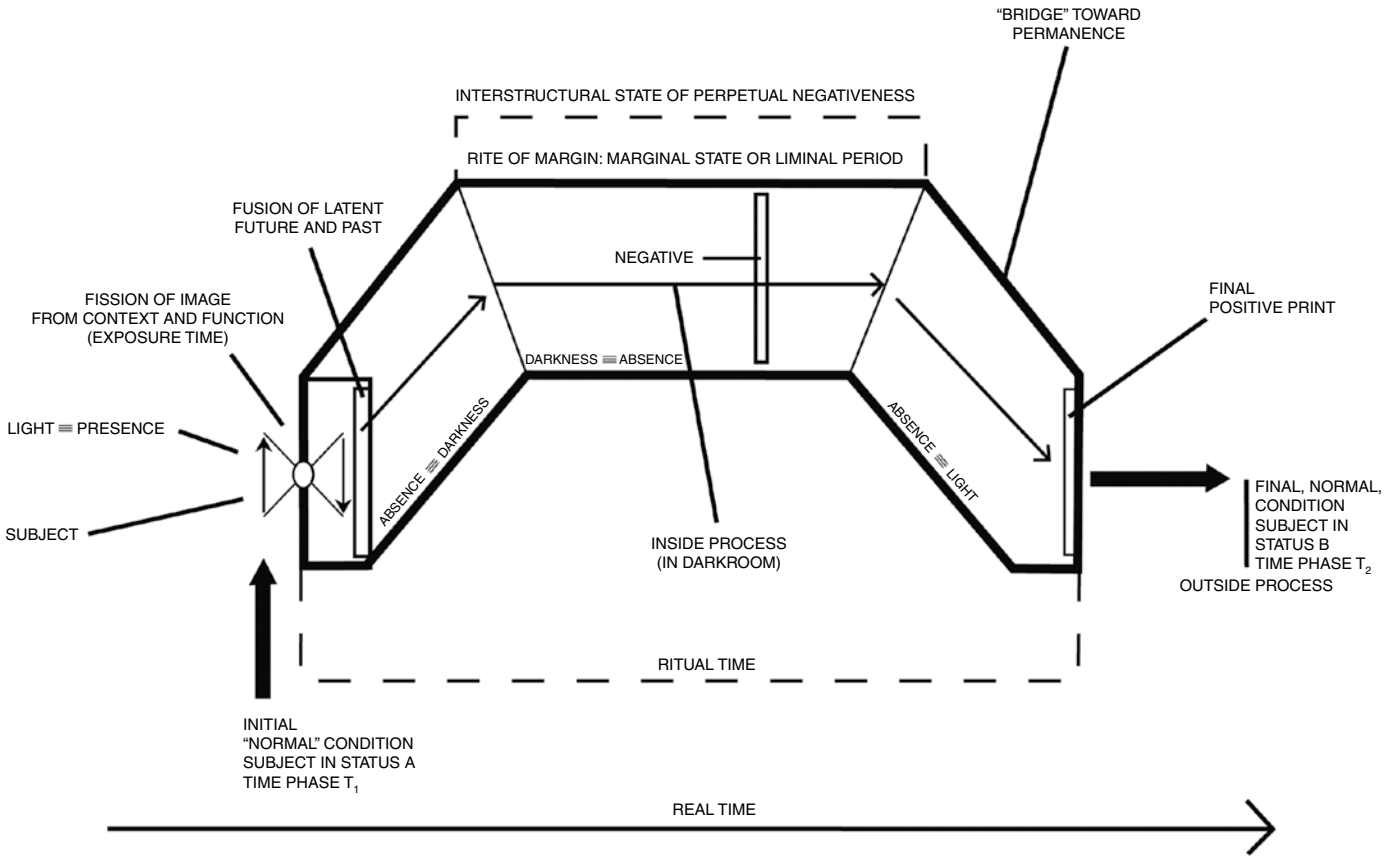

Figure 1.4 The symbolic and spatiotemporal operation performed by a basic photographic (and cinematographic) rite of passage.
Source: Based on a diagram in Tomas (1983: 15).

iii) The cinematic rite of passage

From the viewpoint of film production, a standard pre-digital cinematic rite of passage is structured and operates like its photographic counterpart insofar as films are composed strips of individual photographic "cells" that have been subject to optical-chemical manipulation and transformation (see Figure 1.5). The major differences between the two processes concern the mechanical elements of the movie camera, the use of a projector, and the way films have been presented on two-dimensional screens in specially designed architectural environments known as theaters or *cinemas*.

We tend to forget how strange cinemas are when considered from an anthropological viewpoint: how they invert day and night; how they regiment and orient human bodies in one direction so that they all face a common screen; how they serve to represent different kinds of stories from the past, present, and future about what it means to be human, what is considered acceptable or unacceptable human behavior, and what kinds of intelligences might exist beyond the earth's limits and the evolutionary parameters of the human species, or physical boundaries of the human body.

Cinemas bear a striking resemblance to traditional liminal sites in their curious exclusionary spatial and social properties. These locations are dark, enclosed environments in which a group of people view physically "nonexistent" realities (defined by events and stories) that are projected onto a two-dimensional surface through the medium of light. These realities, whose cultural contents are as diverse as their social and political inflections, range from depictions of the mundane to the fantastic and monstrous. But in all cases, they tell us something about the ways in which we live and behave, collectively and individually, and

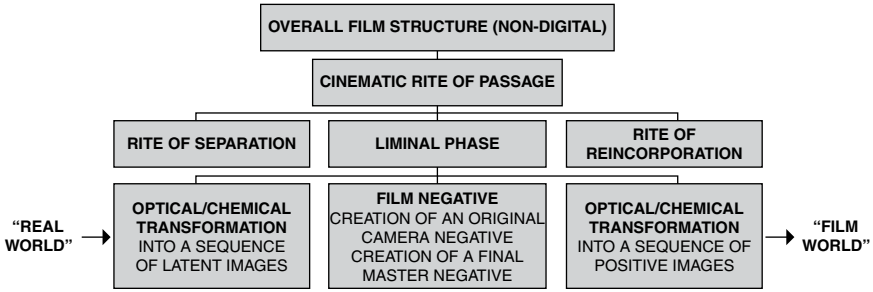

Figure 1.5 A basic cinematic rite of passage.

Source: Based on a diagram in Tomas (2007: 12).

they provide us with special insights into what it means to be human and social beings in specific cultures and subcultures. The liminality of cinemas is further accentuated by a symbolic exchange between the "living" and "dead"—the former virtually presented on screen, in a scale that often significantly exceeds that of the human body, as moving, talking interacting figures; while the latter are reproduced in the order, rigidity (almost a form of social rigor mortis) and regimentality of an audience enveloped in a mausoleatory darkness, collectively staring in the same direction at a large screen displaying moving pictures.

In contrast to a still camera, the mechanics of the movie camera is devoted to the production of an extended sequence of photographic images on a thin strip/roll of light-sensitive emulsion-coated film base (e.g. cellulose nitrate base film or cellulose acetate film). A projector is, in contrast, a specialized machine whose function is to enlarge and transmit sequences of photographic images produced by movie cameras onto a distant screen with the aid of light and at a speed that reproduces the movement registered in the compositional/tonal differences between each successive photographic frame as originally registered by way of a movie camera. The film is normally projected at a magnitude of reproduction that is well beyond the scale of the human body. The size of the image is determined by the number of seats in a cinema, its form, and the film gauge (8mm, 16mm, 35mm, 70mm). Moving pictures are, in contrast to photographs, part of a larger socio-architecturally integrated system or technology of representation. They are most often viewed in networks of dedicated architectural environments (called cinemas) that can present the same or different films simultaneously at different locations, day or night. It is important to note that the cinema/projector/screen system also embodies the basic form and logic of the photographic camera which is macro-projected and "macro-represented" in the former system's structure and the relationships between its elements (see Figure 1.6).

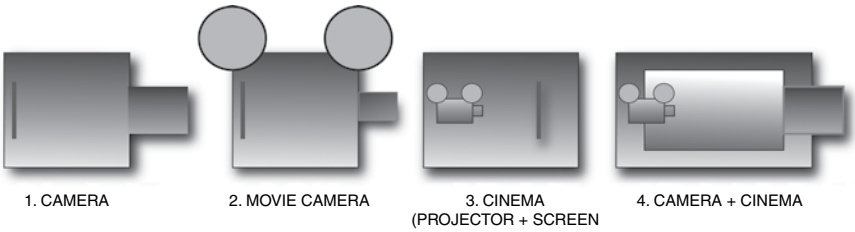

Figure 1.6 The mise en abyme logic of the photographic/movie camera/cinema/projector/screen system.

There are compelling similarities between a traditional rite of passage and photographic and cinematic processes of production. The importance of these similarities and their implications for understanding the social and cultural dimensions of the *technological* systems and photochemical processes implicated in the production of photographs and films cannot be underestimated.

On the one hand, the rite of passage functions, in each case, as a bridge between a "concrete" world and a representational/symbolic world of images. The two worlds can be understood to function in parallel, with the former's transience and spatiotemporal fluidity and impermanence periodically translated by specialized apparatus (cameras and movie cameras) and social agents (amateur or professional photographer, cameraman and woman, or director and film crew in the cases of large-scale film production) into the medium of photographs or film that, in turn, can be treated as the fragments of a vast panhuman visual memory. Although impossible to map in detail beyond basic subject categories, they are elements of a vast intersystemic posthuman visual ecology of "Mind" (Bateson 1972e: 482). It is hard to imagine today that there was a time when human existence was not mediated by photographs and films. Since 1839, and especially since the invention of the movie camera in the 1890s, the histories of cultures, social groups, and individuals are rooted in and nurtured by a vast agglomeration of photographs and films, the elementary "cells" of a global collective memory, composed of a continuously expanding matrix (of millions) of photographs and films. Such a "collective memory" raises an interesting question about the possible nature and status of the *posthuman* and its collective consciousness: a question that I hope to address in the following chapters, not necessarily in "cellular" but in processual ritual and symbolic terms.

On the other hand, an adherence to a rite of passage model in both cases displaces the entry points for the analysis of photographs and films from questions related to image construction (such as one finds in the cases of a semiotics and semiology of the photographic or cinematographic image) to questions about the relationships between *processes* of image construction and their social and cultural functions. This displacement leads away from pure semiotic analysis or even cultural/visual studies-based analyses to questions that link image production to process and ritual-based social functions. The distinction is subtle but fundamental, for this shift in emphasis allows one to explore the photochemical representational products of a Western pictorial tradition from the viewpoints of their shifting socio-ritualistic functions (as defined by their processes of production) in order to answer traditional

"anthropological" questions. For these questions can serve as useful tools for discovering additional information on the transformations in the fundamental roles of imaging technologies that are implicated in a sociocultural semiotics of (image) production as it is redefined through new processes of industrialization and automation. This approach redirects research away from the image (considered as a unique site for the construction and reception of meaning) toward the processual construction of meaning(s) that are generated along pathways of image production governed by the ritual functions of specific social processes of production. This shift from product to process leads to a basic set of questions that are independent of any image's "individual" message and associated social functions and stylistic attributes.

- What kind of basic collective social and symbolic transformations are photochemical (or electronic sensor-based) processes of production designed to deal with?
- How do they achieve these ends?
- For whom and in terms of whom do they operate?

There are other questions that might no longer seem to be relevant because of the global ubiquity of photography and film, the advent of "integrated" digital imaging systems, and the global deployment of various new post 1980s satellite mediated digital imaging systems.[11] They have to do with photography's and cinematography's so-called objective technological transparency and their cultural neutrality as media of data/information recording (archiving) and transmission.

If one considers photography and cinematography to be important Western rites of passage that are associated with the creation of a parallel, nonlinear or distributed collective visual memory/cultural archive (and, by extension, meta- or posthuman matrix), then these questions are not only appropriate but they are also important because of the way that they highlight global processes of centralization and the control of cultural information, knowledge, and ultimately collective cultural memories and, moreover, the neutralization or destruction of local nonvisual (e.g. aural) histories. The realization that these processes might also be implicated in such an innocuous practice as using a camera leads to another set of important questions concerning the (Western) functions of photographic or cinematographic rites of passage.

- What are the cultural implications of using Western ritually based industrialized pictorial practices to record and document non-Western subjects, and sociocultural activities?
- What "world(s)" are non-Western peoples and cultures entering when they are filmed or when they film themselves according to a ritual of technology that basically articulates Western technological, aesthetic, cosmic, and ultimately even Judeo-Christian values?[12]

These questions might appear to be outmoded or obsolete in a world that is subject to the intense economic pressures of globalization with its propensity to interlock historical time, geographical space, and local cultures within the framework of an evolving capitalist system based on the deployment of systems of transportation and communication that "promote" economic and cultural integration through the liberal exchange of goods and knowledge (Harvey 1989). Such questions are, however, still pertinent today, if only to remind us that there is no culturally and historically neutral technology, even ones as useful and innocuous as photography and cinematography appear to be. They can also sensitize the reader to implicit cultural parameters and a direction of acculturation that is built into the concept and prospect of the posthuman: to the fact that this new evolutionary stage of human development (or mutation depending on one's viewpoint) has a geopolitical and sociocultural origin in a tradition of ideas, social models, and technologies with all that this implies in terms of dominant evolutionary models.[13] While a detailed discussion of these questions, and their theoretical and practical implications are outside of this book's mandate, I will nevertheless demonstrate in the following pages how *The Man with a Movie Camera* and Vertov's theory of Kino-Eye method and its system of production, can sensitize us to the politics—both symbolic and mimetic—implicated in film production and its culture of vision, while reminding us, once again, of the range of human expression that is possible when we begin to challenge inherited ways of looking at and seeing ourselves and others in the name of different cultural realities and patterns of existence, human and even posthuman possibilities.

Vertov's Kino-Eye project is especially significant in this regard, because it provides an innovative, well-structured, and clearly documented attempt to perceptually *re-engineer* human vision by redefining its social/technological foundations and political orientation through the application of a structured (in theory if not always in practice) collective mode of film production.[14] In contrast to other types of film organization, Kino-Eye was dedicated to exploring, in an

almost comparative ethnographic fashion, Soviet society at a given point in time, and it did so through a collective, hierarchic—almost militaristic/Tayloristic—model of a system of observation and manufacture whose coefficient of efficiency was tailored to specific cultural and political ends.[15] This attempt was, moreover, radical enough to have effectively challenged cinema practice as then understood—a challenge that has been taken up by experimental and politically engaged filmmakers from Jean-Luc Godard to Farocki. Vertov's work has also influenced, as noted in the Introduction to this book, a younger generation of media artists who are now exploring the possibilities of new communications/information systems such as the internet.[16]

Preamble to a kinomatic rite of passage: A note on Vertov's politics of representation

Vertov's revolutionary film practice was founded on a "non-acted" or documentary model of film production. He argued that an inherent weakness of fictional films was their tendency to separate, too easily, the realms of work and leisure according to a governing opposition between methods of analysis (science) and practices of interpretation (art). In contrast, his factually based "non-acted" film practice was predicated on a synthesis of art and science, interpretation and analysis.[17] This synthesis was carefully crafted, under the auspices of a logic of montage editing, to produce a revolutionary poetics that was, in Vertov's estimation, powerful enough to induce a critical social consciousness in film audiences. For Vertov, its power resided in its ability to redefine the parameters of binocular vision and thus challenge and then transform an audience's habitual modes of perception according to cinematic knowledge (i.e. knowledge of and by way of the movie camera and the application of methods of film editing to visual information insofar as information processing would begin with the scouting out of visual locations for the generation of pertinent data according to a preestablished kinomatic thematic objective). When considered in the context of the dominant models for early-twentieth-century film production, this poetics was nothing less than a carefully honed weapon with which to attack the literary and theatrical tendencies that Vertov considered to be destructive counter-revolutionary forces in a young Soviet film culture. Its main objective was to undermine their basic fictional logic and associated system of coding which, in the latter case, amounted to an assault on their technological transparency,

narrative teleology, and illusionism, the combination of which resulted, in Vertov's opinion, in the spectator's unconscious intoxication.[18] Vertov's objective, in contrast, was to transform the viewing subject into a reflexively conscious, potentially active social and political agent (Vertov "The Essence of Kino-Eye" (1925), 1984: 49–50).

This poetics was the product of three innovations. First, Vertov shifted the emphasis in film production's social logic from product to process of manufacture (hence the film's innovative focus on the relationship between film production and labor). He hoped, by doing so, to draw attention to film as *mode of production* and to film as socially and economically integrated *system of manufacture*, as opposed to film as mode of entertainment. Vertov's strategy, as deployed in *The Man with a Movie Camera*, was to reflexively incorporate film production into the film narrative and to treat it as a primary subject matter.

Second, he argued that it was necessary to recast the notion of process itself in a "non-acted" or documentary mold. Film production would thus be displaced from the studio to the street. The camera would be propelled into an urban, industrialized environment and embryonic socialist culture where it could engage with new forms of manufacture, social organization, and equivalent modes of communication. The resulting shots could then be linked together in such a way as to produce a critical commentary based on comparative analysis, visual propositions, readings and interpretations. These alternatives were structured in terms of a film's capacity to evoke post-Euclidean perceptual spaces and their unusual relativistic acausal visual possiblities and resulting experiences. They were therefore consciously anchored in the early twentieth century's most advanced models of reality.[19] Moreover, as *The Man with a Movie Camera* demonstrated, this shift allowed for the cinematic ingestion of a new range of social protagonists, including cameramen and editors, as film "characters" and "subjects."

Third, Vertov proposed a collective form of social/kinomatic organization that would link these innovations directly to the most fundamental unit of film production/reproduction: The creation of difference between two frames of a film by way of the passage of a filmstrip through a movie camera's film gate (Figure 1.7).

The sum total of these innovations embodied, in Vertov's estimation, the spirit as well as the political and social aspirations, dialectical manufacturing logic and visual methodology of a "cinematic October of the whole Soviet Union, of the whole world" (Vertov "Kino-Eye," 1984: 75).

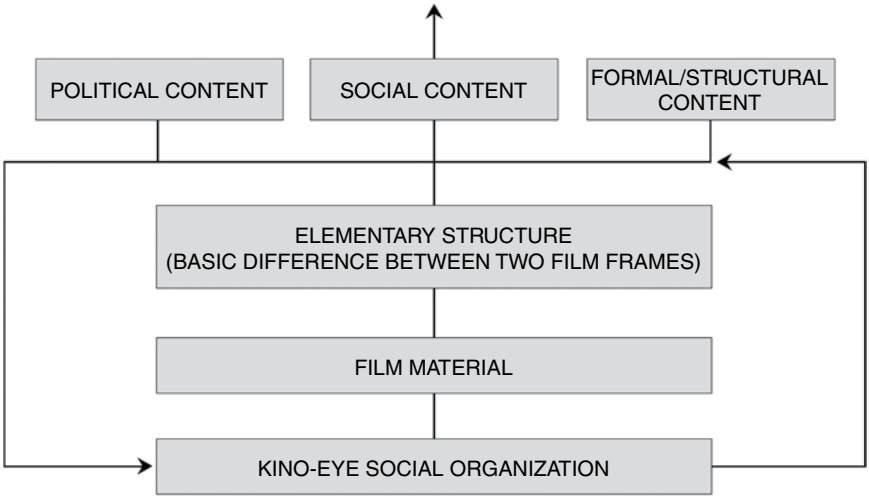

Figure 1.7 *The Man with a Movie Camera*'s basic socio-logic.
Source: Based on a diagram in Tomas (2007: 9).

This new reflexively based documentary method of conceiving of filmmaking formalized, regimented, and theorized cameraman/film crew activities insofar as these activities were taking place beyond the confines of the film studio. But the new method also served as an incubator for a different model of the cinematographic agent, and "actor" who was no longer conceived as an autonomous agent embodied in a particular human organism. The old fictional actor whose allegiances Vertov traced to theater and literature, was transformed into a productive element in a hierarchic system of observation/manufacture; a system whose objective was to produce social "facts" even though, in practice, its representative in *The Man with a Movie Camera* was a character (the cameraman) "played" by a specific person: Vertov's brother, Mikhail Kaufman. Today we tend to take for granted the increasing integration or cybernetic fusion—the convergence—of the human organism with machine systems. However, in the late nineteenth and early twentieth centuries, this form of integration was only beginning to be explored in the work of avant-garde artists and it was only in the mid-twentieth century that it was given the name of *cyborg*, a neologism for cybernetic organism (Clynes and Kline 1960). As I have suggested, *The Man with a Movie Camera* is a sophisticated and exhaustive statement of Vertov's Kino-Eye theory and method that pivots on observation, classification, and the reconstruction/reorganization of visual material by way of a reflexive

documentary practice. It also serves as a manual and reference for developing reflexive urban cartographies that are able to document the matrix of a society in transition while simultaneously foregrounding the strategies (the technical and organizational methods) used by the "cartographer" (the cinematographer) to come to terms with this transition.

At the level of manufacture, *The Man with a Movie Camera* links the activities of a cameraman to those of an editor and audience, and it grounds these activities in a wider industrial culture. As a visual artifact, it also represents—embodies—a perceptual process of manufacture, its products a new social vision and consciousness. The "conveyor belt" for these activities and processes is provided by a formal and thematic itinerary that visually interweaves the human activities that define a day in the life of a society in the making with the technological apparatus and human activities that are capable of visually surveying and recording this society on its own terms (i.e. in terms of its new perceptual/spatial logics). Together they constitute themselves into a meta-social/kinomatic space in the process of reconstituting a factually grounded day in the fictional life of a Soviet city. The film thus articulates, within its medium and "narrative," two parallel interconnected micro-rites of passage, the one that embodied and sustained its production as cinematic object, the other that articulates a particular "dioptric" solution to the problem of generating an alternative camera-based socialist culture of vision; a problem "solved" through the structure and actions of a novel form of machine vision and "intelligence" based on collective manufacture/observation.

The Man with a Movie Camera: A kinomatic rite of passage

The Man with a Movie Camera exhibits a complex set of relationships with the traditional content of a biosocial rite of passage that mediates organic and social events like birth, death, marriage, or cyclical seasonal and cosmic events such as the harvest because of its primary subject matter and the way that it is constructed. Moreover, if any film can be treated as a rite of passage, from the perspective of its optical/chemical process of production and cosmic—light/dark-white/black-presence/absence-based—physical/symbolic transformations, then Vertov's film represents a special case because of the way that it structures and presents its subject matter: its own process of production and its underlying sociocultural, industrial, and embryonic posthuman themes. In fact, the film's

specificity in regard to its cosmic/mythic roots is located in the *historical* solution that it proposes to cinematography's mythic ahistorical foundations. In a basic cinematic rite of passage, each individual subject/element is optically and chemically processed through a sequence of stages. In this sense, there is no difference between Vertov's film and any other film. However, *The Man with a Movie Camera*'s narrative and thematic composition (cinema, its apparatus, and viewing activities/life in a city from morning to evening/cinema as site of reflexive kinomatic (re-)production) is also structured as a sociopolitical, labor-based rite of passage; and it is in terms of this content and structure that this film must be considered to be a highly unusual, if not unique, "social" event. A quick overview of these characteristics reveals the nature of its unusual identity and function.

The Man with a Movie Camera is ritually structured according to the following symbolic/processual and structural/material logics:

1. An opening manifesto that transmits the film's historical and political, media-based peculiarities to its audience. This manifesto serves as the rite of separation's threshold between different worlds based on a set of clear distinctions. Separation is reinforced by the establishing shots of a giant movie camera which serves as the "stage" for the introduction of a (miniature) cameraman and his "apparatus." The process of separation is further articulated through the unusual presentation of an audience's entry into a cinema, which marks a passage from the world of everyday socio-cultural and economic activity to the material and technical world of cinematic representation: the presentation of the projectionist, film canisters, reels, and the technology (projector), procedures and other personnel (an orchestra) implicated in the presentation of a film in 1929.[20]
2. A liminal phase that introduces a spectator to the themes to be dealt with in the remainder of the film, to the mechanics of cinematographic representation, to the nature of contemporary social activity in a metropolis, to the way the metropolis is organized in terms of different systems of transportation and communication, and to the correspondences and intimate relationships between these systems, film as process of manufacture, manufactured product and medium of communication.[21]
3. A rite of reincorporation that is distinguished by a return to the original cinema depicted at the beginning of the film, and to the presentation of the film that inaugurated the rite of separation passage which turns out to be

> *The Man with a Movie Camera*.[22] This rite also summarizes the previous two stages and introduces the virtual (screen within screen and screen-based) and "real" (actual) film audience to the new film intelligence that has gestated and matured through its prior ritual stages. The cameraman is now replaced by an autonomous (animated) camera and camera-based, tripod-integrated *kinomatic* agent that takes its bow, at the beginning of the reincorporation process, and thereby claims its authorial place in the film. This new "intelligence" is presented as the product of a kinomatic rite of passage. But it is not the only product of this ritual process. For the *The Man with a Movie Camera* is also designed to function as a rite of passage for its viewers.

Late 1920s techniques of film production and presentation, *The Man with a Movie Camera*'s urban day-in-the-life subject matter, and its ritual structure combined to form an integrated system/process with a clearly articulated logic and set of relationships (see Figure 1.8).

The first section of *The Man with a Movie Camera* reflexively introduces the spectator/audience to its own context of observation: the cinema. The sequence is introduced by the following warning: "Attention viewers: This film represents in itself an experiment in the cinematic communication of visible events; without the aid of intertitles (a film without intertitles); without the aid of a scenario (a film without a script); without the aid of theatre (a film without sets, actors, etc.); this experimental work was made with the intention of creating a truly international ultimate language of cinema on the basis of its total separation from the language of theatre and literature." This warning shatters any expectations about seeing a conventional fictional film. It highlights its *experimental* nature, thereby sensitizing the audience to the rather unusual sequence of events that immediately begins to unfold before their eyes through the activities of a new kind of real-life protagonist: the cameraman. The wording of the introduction, with its anti-fictional experimental stance and its vigorous theoretical and proto-revolutionary tone, heralds the appearance of a new type of film.

The majority of the cameraman's activities, as presented in the central portion of Vertov's film, are preceded by the separation rite's introductory survey of the mechanics of cinema reproduction. Although it is presented under the sign of production, in this case a giant movie camera which serves as the platform for the appearance (introduction) of the cameraman and his equipment (the film is always clear as to the priority of this distinction), representation is considered, in

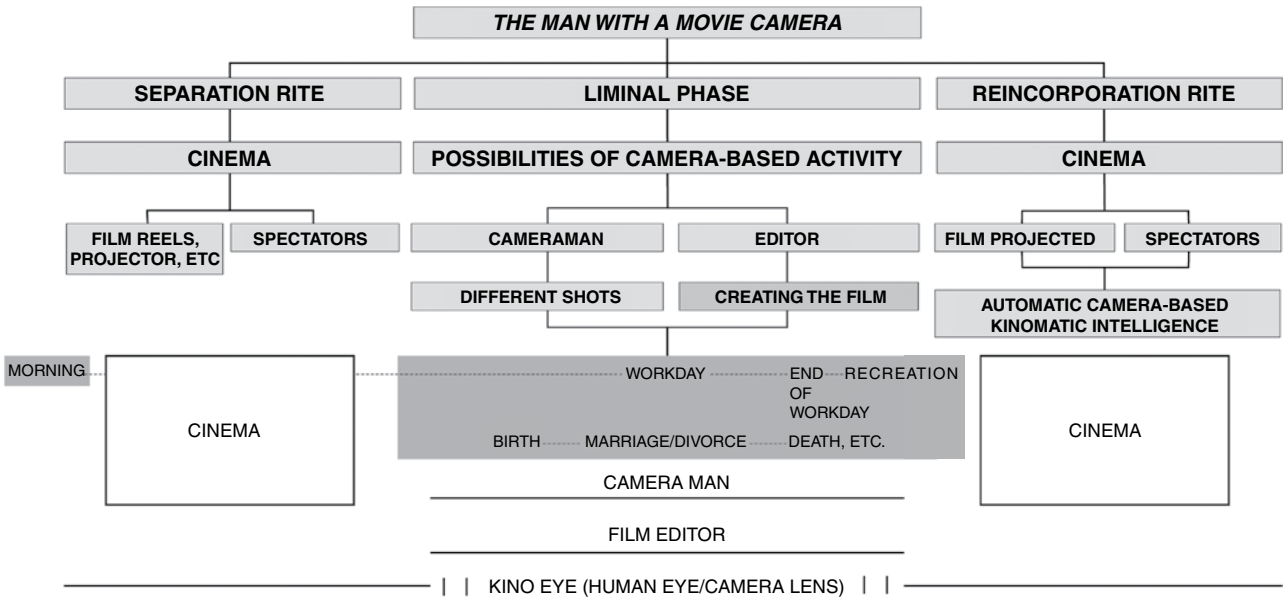

Figure 1.8 *The Man with a Movie Camera*'s articulated logic and set of ritual/thematic relationships. They are deployed between the opening image of a giant movie camera and the film's concluding close-up of the camera lens/eye.

Source: Based on a diagram in Tomas (2007: 14).

this separation sequence, from the point of view of the cinema as opposed to the movie camera: interior of cinema with its empty seats, projector and projectionist, film, chandeliers, seats (animated this time), audience, orchestra, and conductor, etc. The audience is thus introduced to itself in the form of its double; divided in terms of representation (an audience on the screen) and self-representation (the audience is depicted as preparing to watch a film). This ensures a common identification between "audiences" while introducing the idea that the film's "story" might have nothing to do with "the old 'artistic' [i.e. narrative] models" of literature or the theater that were based, as Vertov saw it, on "a literary skeleton plus film-illustrations" (Vertov, "Kinoks: A Revolution" (1923), 1984: 12). In fact, the possibility that the old models, whose narrative unfurling was ultimately determined by a script's guidance and point of view, might be operating in this case, is negated by the perceptual conjoining of audiences about to watch a "common" but highly unusual film in which they already have a collaborative role in ensuring its social articulation and presentation. One is reminded of Jacques Lacan's theory of the mirror stage, where the child (initiand) enters society through a process of self-referential identification (Lacan 1977:1–7).

If the film goes on to produce a kinomatic dislocation of the audience's atomistic or individual powers of vision—powers previously governed by a "process of identification and participation" (Michelson 1972: 69)—it nevertheless does so under a contradictory sign: the dialectic of identification and alienation first introduced in a separation sequence. The result is the inauguration of "*a crisis of belief*," as Michelson has succinctly described it, which will be consummated by the "exposure of the terms and dynamics of cinematic illusionism" (1972: 69, emphases in the original).

The liminal phase of this *kinomatic* rite of passage, introduced by the numeral "1," is governed by a "dominant" dioptric symbol, the Camera/Eye, which is periodically foregrounded during the course of the film either in the form of a camera lens or an in-frame montage superimposition/fusion of camera lens and human eye.[23] The film articulates its socialist "vision," in this phase, according to a series of comparative thematic vignettes. These include paradigmatic rites of passage subjects (birth, marriage, death), a series of social themes (work and leisure), political issues (the contrast between socialist behavior and residues of bourgeois behavior) and, most importantly, various comparisons between the mechanics and labor activities of film production and the mechanics and labor activities of industrial production; and it does so according to a pure film semiologic based on the unique spatiotemporal possibilities offered by motion picture

technology *when used outside of the studio and within the context of the "real."* It is, therefore, the movie camera/human body's Camera/Eye (Kino-Eye) activity, in particular its ability to witness and record the dynamic range of social life that is celebrated in this liminal phase, along with the Camera/Eye's capacity to produce an archive of pertinent information that can be used to produce a comparative political ethnography of an emerging communist urban/industrial milieu along with a new revolutionary social consciousness. A unique and self-conscious collective intelligence is suggested and promoted by the ingestion and fusion of the audience and film through this kinomatic rite of passage.

The audience is then reintroduced, through a kinomatic rite of perceptual reincorporation or aggregation, to the conditions of cinema representation: with "itself" *qua* audience; with the special context in which the film is being presented (a cinema); and thus to its status as representation and self-representation, consciousness and self-consciousness. But the situation is somewhat different this time, because the audience is not only introduced to itself on a screen within a screen, it is also introduced to an animated, anthropomorphized movie camera who, in performing in front of the audience and in taking its bow, seems to be claiming a central role in the staging of this kinomatic "event"—a claim that is apparently confirmed by the ensuing recapitulation of major themes, punctuated by copious references to the mechanics of cinema and cinematic representation that are dynamized by a constant montage of audience, screen, cameraman, and editor. This montage ensures that film and audience cross over into each other's domain, an exchange and fusion that is celebrated in a spectacular perceptual *mise en abyme* in which the audience becomes spectator to an audience watching a film which turns out to be *The Man with a Movie Camera*, a connection that had not been directly made during the opening separation sequence. The film ends with the Camera/Eye staring at the audience, its diaphragm closing into darkness: a process mediated, however, by what appears to be a brief *interval* of pure light. By the end of the film, the audience has been subject to a process of cross-fertilization and rebirth under the auspices of this Camera/Eye symbol. The movie camera-tripod animation confirms its governing rule in this process, and its anthropomorphized form and animated intelligence provide the final links between the human/organic and Kino-Eye's nonhuman distributed machine-based intelligence.

What is the objective of this rite of passage and what is its relevance for a film audience today? First, at a basic perceptual level of cinematic experience, *The Man with a Movie Camera* connects and mediates two social stages of vision: a

prerevolutionary reality, whose dominant model is isolated and defined in terms of the natural or unconscious acceptance of an unproblematized illusionism (a condition which is highlighted and challenged in the film's inaugural manifesto); and a postrevolutionary cubo-futurist model (Malevich 2004) that takes form as a dynamic, dialectical, "non-acted" kinomatic film culture predicated on a new logic of perception or method of constructing a film called *montage*. Thus the film's visual dexterity, as well as its ritual-ethnographic and sociopolitical engagements, are promoted as integrated functions of machine-based perceptual transformation.

The Man with a Movie Camera's ritually based kinomatic transformation is clearly mediated by a desire to optically induce a crisis of mimetic belief that is accompanied by a visual celebration of the transformative social powers of Kino-Eye; powers generated by "its own dimensions of time and space" and presented as if completely severed from "the weakness of the human eye" (Vertov, "Kinoks: A Revolution," 1984: 16).[24] If the cameraman gives a purpose to the movie camera, the latter extends the former's vision and powers of observation. It is also clear that the transformation is designed to be mediated by a new form of intelligence. In the words of this 1923 manifesto, "the kinok-pilot, who not only controls the camera's movements, but entrusts himself to it during experiments in space" (Vertov 1984: 19). Vertov had anticipated the kinomatic results of such a transformative union in this manifesto when he argued that as a "result of this concerted action of the liberated and perfected camera and the strategic brain of man directing, observing, and gauging—the presentation of even the most ordinary things will take on an exceptionally fresh and interesting aspect"—a comment that points to Viktor Shklovsky's theory of defamiliarization or *ostranenie*, as well as being materialized in a spectacular fashion throughout *The Man with a Movie Camera*, especially its concluding section (Vertov 1984: 19; Shklovsky 1965: 3–24).

There is an array of cinematic techniques of defamiliarization that operate throughout Vertov's film (Michelson 1972: 69–70). Visual strategies of perceptual distanciation include references to the film screen as representational surface; the disruption of action sequences through the use of techniques of stop motion animation; the use of different film speeds to produce arrested, slow, and accelerated motion that call into question the notion of normal film speed and thus the narrative pace of conventional cinematic vision. Filmic illusion is constantly disrupted by strategically situated clashes/comparisons between "illusion experienced" and "illusion revealed," and film and film screen

as distinct, yet interfaced surfaces of representation. Techniques of distortion and abstraction are also used to draw attention to the constructed nature of the image: its dual pictorial and optical/ocular origins and perceptual effects. Finally there is a consistent attempt to place cinematic understanding, according to these techniques of perceptual distanciation, on an intellectual as opposed to an emotive footing, although the former is always infiltrated by the distance reducing powers of reflexive "ludic" micro-events such as a magician's tricks (a play on the editor's ability to make things appear and disappear) or the mimicking of the hand cranking of the movie camera by a filmed subject (a clear, reflexive acknowledgment of the filmmaker's intrusive presence and film's means of production).

These strategies were designed to induce a kinomatically manufactured crisis of "habitus" (Bourdieu 1977: 72–3, 86) as the Camera/Eye visually explored and celebrated, in an informed and politicized manner, its hypothetical liberation from the constraints of the human body's materiality and its physical limitations and its conventional sociocultural environment. *The Man with a Movie Camera*'s objectives, in this domain, relate to the presentation of visual/pictorial experiences that could perturb conventional forms of belief, nourished by established and traditionally secured social and cultural environments—beliefs that could be nurtured and transmitted by bodies and minds: from the latent aesthetic pleasures and complacency that could be associated with habitual perception, as determined by inherited forms of knowledge, to inherited patterns of identity associated with social roles. Vertov's film promoted a measured—calculated—contact with new sociopolitical themes such as the comparative and complementary behavior of machines, workers, cameramen and film editors within a systemic patchwork of references to traditional prerevolutionary forms of behavior. As in the example of a classic rite of passage ceremony, one is privy to the audience's introduction to the social and cultural mechanics of their new (Socialist) way of life, its normative and ethical frameworks and its distinguishing characteristics as compared to bourgeois standards of behavior. Thus, in keeping with the social functions of liminal ritual activities, where a culture is decomposed along the lines of its dominant symbols and recomposed in new and unusual ways, *The Man with a Movie Camera*'s propositions for a new form of collective existence were deployed in a post-Euclidean cinematic space and based on a kinomatic process of socialization whose thematic context is provided by the new urban/industrial systems of communication, transportation, manufacture, and the patterns of work, including Kino-Eye work, the knowledge they engendered and

the leisure time and activities they were capable of generating as their *productive* by-products. These propositions are also accompanied by an analysis and demonstration of the mechanics, characteristics and visual/pictorial—analytic and synthetic—possibilities of the movie camera and its raw material—film stock—as represented together in a final product: a motion picture with the title of *The Man with a Movie Camera*. One of the singular theoretical contributions of Vertov's film to this process of socialization was its insistence on defining a new sociopolitical intelligence and consciousness in terms of an interconnected communications/transportation system whose dominant symbol was the Camera/Eye. Kino-Eye's social organization could serve as an appropriate model of this system. Almost 80 years later, Farocki would explore the nature of this intelligence in the context of a new sociopolitical regime—postindustrial capitalism—and culture of surveillance (see Chapter 8 for a discussion of this culture in the context of Farocki's *Eye/Machine* trilogy and *Counter-Music*).

However, Vertov's ambitions extended well beyond ocularcentric transformations in archaic social/kinomatic practices. He was ultimately interested in inaugurating a *collective* revolutionary transformation in the total human sensorium. It is in relation to this ambition that *The Man with a Movie Camera*'s rite of reincorporation sequence reveals its prophetic posthuman evolutionary function. With this aim, we pass beyond the immediate experience of *The Man with a Movie Camera* in order to reconsider in detail the function of the kinoks and Kino-Eye in Vertov's model of film production.

On machine vision, the rationalization of observation and its linkage to a posthuman spectatorial consciousness: Vertov on "the work of the Kino-Eye"

Vertov's strategies of film production were deployed in relation to an inherited scopic regime: Cartesian perspectivalism (Jay 1988: 5). He proposed to challenge this regime on its own terms, that is, through the use of a recently invented (1888) semiautomatic photographically based recording technology of observation/reproduction that embodied that regime in its optical system: the movie camera.[25] Thus, he argued in "Kinoks: A Revolution" (1984: 14–5, 16):

> We . . . take as the point of departure the use of the camera as a kino-eye, more perfect than the human eye, for the exploration of the chaos of visual phenomena that fills space.

> The kino-eye lives and moves in time and space; it gathers and records impressions in a manner wholly different from that of the human eye. The position of our bodies while observing or our perception of a certain number of features of a visual phenomenon in a given instant are by no means obligatory limitations for the camera which, since it is perfected, perceives more and better . . .
>
> Until now, we have violated the movie camera and forced it to copy the work of our eye. And the better the copy, the better the shooting was thought to be. Starting today we are liberating the camera and making it work in the opposite direction—away from copying.

However, it was not just the movie camera's superior powers of observation that converted cinematographic activity into a tool of perceptual liberation. Transformation was the product of a complex system of observation that was itself structured according to a new acausal method of constructing sequences of images—montage—derived from a politically reconditioned cubo-futurist aesthetic.[26] While many nineteenth and early twentieth century artists were sensitive to the role of powerful modern technologies and industries in mediating contemporary urban existence, the Russian constructivist artists were the first to seek to systematically articulate this understanding in terms of a political agenda that went beyond naive celebration or superficial intellectual critique to embrace total social revolution. *The Man with a Movie Camera* is an exemplary experiential product of this understanding, because it clearly proposes, in the overt linkage of its material, formal, and thematic levels of organization according to an acausal logic of representation (montage), that the technology *and* social organization of cinema directly "mediates," in the words of Judith Mayne (1977: 88), "perception and production"; indeed, that it can also mediate social existence. Thus, what Vertov described as "the *organization of the visible world*" ("Kino-Eye," 1984: 72, emphases in the original) was, in keeping with this understanding, considered to be a *complete* system and process of social manufacture: ultimately a collective *work of editing* that ranged from initial thematic research and primary observation "in the field" to a final product to be experienced in a dialectical perceptual synthesis of cinema/film audience↔cameraman/movie camera↔cameramen/movie cameras↔human eye/Kino-Eye, etc. As Vertov pointed out at the time:

> The kinoks distinguish among:
>
> 1. *Editing during observation*—orienting the unaided eye at any place, any time.
> 2. *Editing after observation*—mentally organizing what has been seen, according to characteristic features.

3. *Editing during filming*—orienting the aided eye of the movie camera in the place inspected in Step 1. Adjusting for the somewhat changed conditions of filming.
4. *Editing after filming*—roughly organizing the footage according to characteristic features. Looking for the montage fragments that are lacking.
5. *Gauging by sight (hunting for montage fragments)*—instantaneous orienting in any visual environment so as to capture the essential link shots. Exceptional attentiveness. A military rule: gauging by sight, speed, attack.
6. *The final editing*—revealing minor, concealed themes together with the major ones. Reorganizing all the footage into the best sequence. Bringing out the core of the film object. Coordinating similar elements, and finally, numerically calculating the montage groupings ("Kino-Eye," 1984: 72).

The composition of this system can be represented in broader terms where the emergence of new perceptual spaces is predicated on the articulation of social organization and collectively based stages of observation (Figure 1.9).

Vertov's description of the coupled organization of kinok activity and observational practices and their relationship to the informed selection of visual material (multilayered editing process) suggests that Kino-Eye was ideally composed of a hierarchic division of labor that functioned as *a technology of observation*—a collective, reflexively "conscious" imaging system that had the capability to simultaneously operate/observe and, indeed, survey a multitude of different social spaces. This "system" was mobile, flexible, and *distributed* as demonstrated by the different sequences presented in *The Man with a Movie Camera* that record a range of kinok filming activities documenting everyday events that range from a birth, funerals, an accident, a firebrigade emergency response, to an array of industrial, commercial. and leisure activities. Vertov's

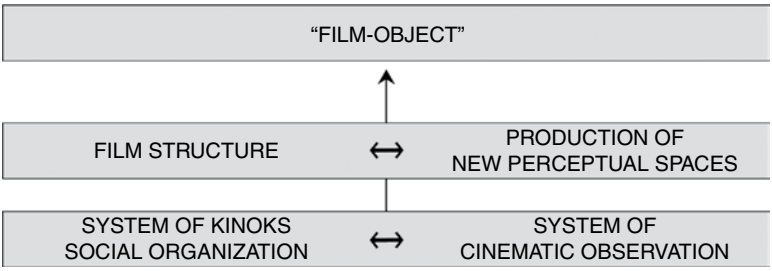

Figure 1.9 The production of new perceptions spaces according to a Kino-Eye (kinomatic) mode of observation/manufacture.

Source: Based on a diagram in Tomas (2007: 15).

description clearly suggests that this technology of observation was also a *process of manufacture* that was socially defined in terms of specific tasks linked to editing and "aesthetically" to montage stages (Figure 1.10).

A distinct hierarchic logic structured social/montage labor from the basic level of individual kinok-observers to kinok-cameramen, kinok-hunters, kinok-editors (women and men) to a final stage that was marked by the emergence of a product (a "film-object") that embodied a clearly articulated kinomatic experience.

But this was not the last stage in Kino-Eye's sociopolitical and aesthetico-cultural aspirations since Vertov (1984: 75) imagined that a decisive phase of manufacture and observation would be represented by a new visual/social consciousness in an audience. Thus Kino-Eye was designed to "manufacture" three clearly identifiable products: a new system of kinomatic observation/process of manufacture, a visual product in the form of a "film object" and a new social product in the guise of a consciously reflexive Soviet citizen.

The concept of Kino-Eye film production was not only predicated on lightweight and mobile camera technology, a concern with a "culture of materials"—"the materiality of the [film] object and . . . its architectonics," it was also articulated in terms of a powerful social technology of observation/manufacture that ranged from the beginning to the end of production (Michelson

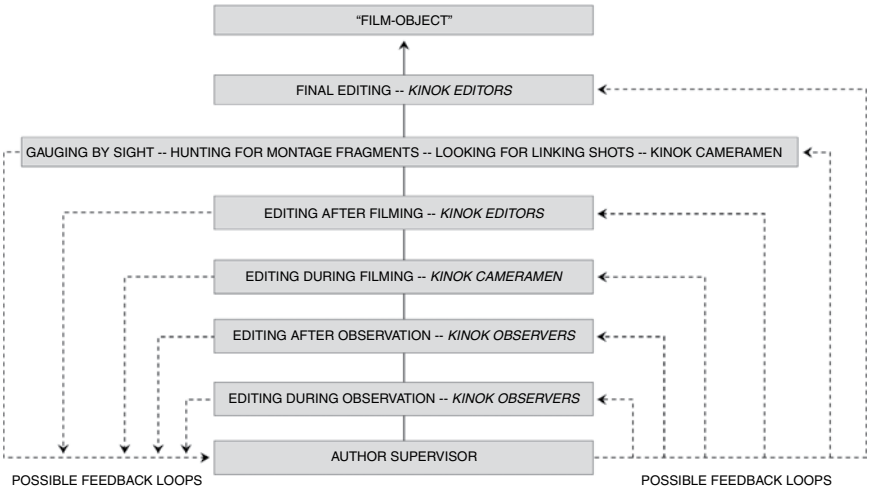

Figure 1.10 Kino-Eye's hierarchy of social organization with its implicit author-based feedback logic.

Source: Based on a diagram in Tomas (2007: 15).

1972: 65).[27] Although one would imagine, ideally, that there were no privileged points of view or observers in this collective mode of observation/manufacture, its hierarchic organization implied coordination by a leader who ensured observational coherence according to an overall thematically articulated goal (Vertov "Kino-Eye," 1984: 69–71). (Although Vertov's model implied collective authorship, it was not, for example, acknowledged in the case of *The Man with a Movie Camera*.[28]) This social technology operated, in principle, as a machine for observing and recording, but it was also a manufacturing process. It therefore reproduced the model of vision that it embodied in a visually self-conscious manner. In short it was a prototype for a new reflexive kind of machine vision both from the viewpoint of its elements (kinoks), social organization (Kino-Eye), and montage—observation and representation—logics. Traces of this technology of observation and process of manufacture are clearly visible in *The Man with a Movie Camera*. The film's thematic flow is governed by the activities of a cameraman (Kaufman), aided by other kinoks, who is seen pursuing "themes" and an editor (Svilova) who is seen classifying, working, and transforming thematic elements/components into a final product. Collective authority tends therefore to be defined in terms of these activities as opposed to an individually defined directorial authority. Moreover, the focus of the film is on an occupation and collective activity as opposed to an individual actor and fictional character, although the former was packaged in terms of the anonymity of a cameraman. The foregrounding of collective authority is also noticeably present in a division of editorial labor that is dominated by an observational logic whose presence in the film is more than symbolized by the Camera/Eye insofar as it also serves as an index of the physical and socio-operational fusion of cameraman and movie camera into a unit that stands in for the larger meta-system of observation/manufacture of which it is also an essential element.

However, there was another facet to this meta-system. A kinomatic rite of passage would involve the Camera/Eye (the kinoks-camera units) and an audience in a continuous vertically extended intersystem of manufactured perceptual transformation whose axis was precisely the Camera/Eye. As "masters of vision, the organizers of visible life, armed with the omnipresent kino-Eye" (Vertov, "Kinoks: A Revolution," 1984: 20), the Kinoks would, after having gone through a process of resocialization marked by a shift of observational context from studio to the street, be in a position to be continuously educated by "life": "that whirlpool of colliding visible phenomena, where everything is real" ("Notebooks, Diaries" (1927), 1984: 167). In other words, far from being independent of the

"real," as in the case of personnel involved in producing fictional films, Vertov's camera/persons would become at once visible and invisible, submissive and sensitive to "life's" sociopolitical vicissitudes and cultural contradictions. It was this process of *reeducation*, grounded as it was in the reality of the everyday and subtly orchestrated by an overarching system of observation/manufacture, which ensured that Kino-Eye's collective consciousness and, by extension, the audience's collective consciousness would no longer fall prey to "the director's megaphone" (Vertov 1984: 167) which stood, in Vertov's mind, as the symbol for all that was antithetical to a liberated and pure language of the cinema, and an emancipated and critical Soviet consciousness.

The Man with a Movie Camera clearly demonstrated that Vertov's concept of Kino-Eye was a viable avenue for a spectator's perceptual/thematic integration in a new social environment, and his adoption of the title "author-supervisor" in the film's opening manifesto is a further, if, oblique, acknowledgment of Kino-Eye's collective authority as vehicle for this integration. Thus, if, as Michelson suggests, *The Man with a Movie Camera* is a film that marks, through its eye-camera lens symbolizations, "a threshold in the development of consciousness" whereby the cameraman was transformed "through the systematic subversion of the certitudes of illusion . . . from a Magician into an Epistemologist" (1972: 72), then it is perhaps also pertinent to point out that the Kino-Eye model of kinomatic production ensured that the cameraman, editor, *and audience* were collectively accorded a new epistemological identity (and function) in its name, the result of a collective coming of age by way of an uncompromising kinomatic rite of passage. But the nature of this new identity was complex and ambiguous.

Beyond poetic documentary: The posthuman and its "post-ocularcentric" culture of representation

i) Éminence Grise: The interval

Annette Michelson introduces her 1992 article "The Wings of Hypothesis: On Montage and the Theory of the Interval" with the following statement: "Within the corpus of montage theory in the period now termed 'classical' there is inscribed a grand floating signifier known as The Theory of the Interval." She continues, "Shadowy, ambiguous, quite generally unexplored within the literature of historical and theoretical analysis, it nevertheless bears, as such ambiguous constructs often will, the connotation of a certain privileged status"; and she

cautions: "Any attempt at clarification must first abandon the notion of a unified construct, however subtle or complex." Instead, she continues, ". . . we must acknowledge it as volatile and polysemic" (1992: 61). Michelson's analysis situates the theory of the interval as conceived by two of its principal theorists, Sergei Eisenstein and Vertov within the context of early-twentieth-century reception of Einstein's theory of special and general relativity in Russia. Her analysis reveals the cultural parameters of the two different, musical and mathematically inspired models used by each filmmaker. However, by the end of her article, the focus of the analysis has shifted away from each model and toward another grand floating signifier of modernity, the figure of the train, a reference that moves with little resistance between the pages of Einstein's early-twentieth-century accounts of relatively theory and Vertov's films, as if to acknowledge the ultimate resistance of the interval to any attempt to reduce it to a precise definition, location, or cultural form. Indeed the power of this central concept of classical montage theory, as articulated by Eisenstein and Vertov, is its ability to occupy many places at once, beyond its capacity to travel along the railway tie/sleeper-like junctures between film frames through a potentially limitless compositional sequence of cinematic images without being tied down to any specific image.

In Vertov's case, the concept of the interval has been most closely associated with his theorization of Kino-Eye practice. The concept was discussed in 1919 and again in 1922 in "We: Variant of a Manifesto" where it is described as follows in relation to the linking, or editing of cinematic elements together:

> The geometrical extract of movement through an exciting succession of images is what's required of montage.
>
> *Kinochestvo is the art of organizing the necessary movements of objects in space as a rhythmical artistic whole, in harmony with the properties of the material and the internal rhythm of each object.*
>
> *Intervals* (the transitions from one movement to another) are the material, the elements of the art of movement, and by no means the movements themselves. It is they (the intervals) which draw the movement to a kinetic resolution.
>
> The organization of movement is the organization of its elements, or its intervals, into phrases.
>
> In each phrase there is a rise, a high point, and a falling off (expressed in varying degrees) of movement.
>
> A composition is made of phrases, just as a phrase is made of intervals of movement. (Vertov 1984: 8–9, emphases in the original)

Clearly there is an ambiguity in this sequence of statements between the interval's existence, function, and *effects* when applied to a "succession of images" and different levels of the film's thematic organization from its material base in kinok observation/recording activity and the film material itself. The interval is defined, in this 1922 manifesto, in terms of *shifts* in movement—of the transitions between movements—and it is manifested, therefore, at an orchestrated, rhythmic perceptual level as opposed to a material level of kinomatic organization, although it is clearly rooted in the latter, and even beyond to the film's graphic ideational origins on paper (see Figures 1.11 and 1.13). However, in a later manifesto entitled "From Kino-Eye to Radio-Eye" (1929) Vertov clarified the term, again in relation to montage:

> Kino-eye is:
>
> Montage, when I select a theme (choosing one from among thousands of possible themes);
>
> Montage, when I make observations for a theme (choosing what is expedient from thousands of observations on the theme);
>
> Montage, when I establish the viewing order of the footage on the theme (selecting the most expedient from thousands of possible groupings of shots, proceeding from the qualities of the film footage as well as from the requirements of the chosen theme).
>
> The school of kino-eye calls for construction of the film-object upon "intervals," that is, upon the movement between shots, upon the visual correlation of shots with one another, upon transitions from one visual stimulus to another.
>
> Movement between shots, the visual "interval," the visual correlation of shots, is, according to Kino-Eye, a complex quantity. It consists of the sum of various correlations, of which the chief ones are—
>
> 1. the correlation of planes (close-up, long shot, etc.);
> 2. the correlation of foreshortenings;
> 3. the correlation of movements within the frame;
> 4. the correlation of light and shadow;
> 5. the correlation of recording speeds.
>
> Proceeding from one or another combination of the correlations, the author determines: (1) the sequence of changes, the sequences of pieces one after another, (2) the length of each change (in feet, in frames), that is, the projection

> time, the viewing time of each individual image. Moreover, besides the movement between shots (the "interval"), one takes into account the visual relation between adjacent shots and of each individual shot to all others engaged in the "montage battle" that is beginning.
>
> To find amid all the mutual reactions, these mutual attractions and repulsions of shots, the most expedient "itinerary" for the eye of the viewer, to reduce this multitude of "intervals" (the movements between shots) to a simple visual equation, a visual formula expressing the basic theme of the film-object in the best way: such is the important and difficult task of the author-editor. (Vertov 1984: 90–1)

In this sequence of statements, Vertov describes montage as the structural logic underlying the process of thematic choice (selection), recording and organization of film material. This logic is a function of Kino-Eye organization. He also describes it in terms of a *visual* formula composed of movements, correlations, and stimulus within an overarching concept of "movements between shots." The interval functions, in harmony with these differing expressions of montage's deployment, as a meta- and micro-organizational concept that is the product and visual *effect* of vertical (Kino-Eye organization), the lateral (kinok movement through space) montage activity, and also a meta- and micro-organizational concept at the level of film content and film materiality, *even though this organizational activity has initially been conceptualized in its terms*. This tight feedback loop matrix is one of the ideal defining characteristics of Kino-Eye practice.

Music provides Vertov with the closest analogy for the interval's visual conceptualization; thus he notes, in a 1922 manifesto: "We: Variant of a Manifesto," "A composition is made of phrases, just as a phrase is made of intervals of movement." He goes on to proclaim, not only, that "To represent a dynamic study on a sheet of paper, we need graphic symbols of movement," but also that "*WE are in search of the film scale*" (Vertov 1984: 9).[29] The manifesto is accompanied by an interesting diagram that presents the relationship between intervals and phrases within the context of an overall film work (Figure 1.11).

As Michelson argues, Vertov's theory was also filtered through a scientific metaphor that crafted the methodology of linking physical and thematic elements (montage) into a form that could unite the material and ideational

Vl4/1 нму . Variant Manifesta," Kino-fot 1, 1922

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пространстве и времени в—ритмическое художественное целое, согласное со свойствами материала и внутренним ритмом каждой вещи.

Материалом—элементами искусства движения—являются интервалы (переходы от одного движения к другому), а отнюдь не самые движения. Они то (интервалы) и влекут действие к кинетическому разрешению.

Организация движения есть организация его элементов, т. е. интервалов во фразы.

В каждой фразе есть под'ем, достижение и падение движения (выявленные в той или другой степени).

ПРОИЗВЕДЕНИЕ.

аб—фраза, ак—произведение

Произведение строится из фраз так же, как фраза из интервалов движения.

Выносив в себе кино-поэму или отрывок, кинок должен уметь его точно записать, чтобы при благоприятных технических условиях дать ему жизнь на экране.

Самый совершенный сценарий конечно не заменит такой записи, так же, как либретто не заменяет пантомимы, так же, как литературные пояснения к произведениям Скрябина никакого представления о его музыке не дают.

Чтобы можно было на листе бумаги изобразить динамический этюд нужны графические знаки движения.

МЫ в поисках кино-гаммы.

МЫ падаем, мы вырастаем вместе с ритмом движений замедленных и ускоренных,

бегущих от нас, мимо нас, на нас,

по кругу, по прямой, по эллипсису,

вправо и влево, со знаками плюс и минус;

движения искривляются, выпрямляются,

делятся, дробятся, умножают себя на себя,

бесшумно простреливая пространство.

Кино есть также искусство вымысла движений вещей в пространстве, отвечающих требованиям науки, воплощение мечты изобретателя, будь то ученый художник, инженер или плотник, осуществление киночеством неосуществимого в жизни.

Рисунки в движении. Чертежи в движении. Проекты грядущего. Теория относительности на экране.

МЫ приветствуем закономерную фантастику движений.

На крыльях гипотез разбегаются в будущее наши пропеллерами вертящиеся глаза.

МЫ верим, что близок момент, когда мы сможем бросить в пространство ураганы движений, сдерживаемые арканами нашей тактики.

Да здравствует динамическая геометрия, пробеги точек, линий, плоскостей, об'емов,

да здравствует поэзия двигающей и двигающейся машины, поэзия рычагов, колес и стальных крыльев, железный крик движений, ослепительные гримасы раскаленных струй.

Именем первого организационного собрания киноков

Дзига Вертов.

ИЗОБРЕТЕНИЯ.

Комитетом изобретений В. С. Н. Х утвержден проект кино-аппарата, изобретенного техником Лавцевичем. Преимущество аппарата в том, что применением его достигается беспрерывное движение ленты, в результате чего получается колоссальная экономия в количестве потребной пленки.

Глифокинематографии.

Все посетители кинематографа наблюдали искажение картин, показываемых на обыкновенном, плоском экране. Эти искажения особенно заметны на боковых краях экрана, когда зритель занимает в зале место сбоку. К этому еще присоединяются искажения верхних и нижних краев в зависимости от близости к экрану, особенно значительные от того, насколько зрители находятся выше или ниже экрана.

Эти искажения являются следствием того, что прямая линия кажется кривой в глубине нашего глаза, на сетчатой оболочке которого отражается образ. Когда упомянутая прямая линия растягивается или когда наш глаз приближается к ней, кривая увеличивается. Так что если мы устанавливаем шахматную доску, образованную из прямых линий, пересеченную под прямыми углами, образ, который получается на нашей сетчатке, от этого искажен. Только средние перпендикуляры остаются неизменными, что касается других, то они составляют сегменты гиперболы.

Доктор Пеш, профессор медицинского факультета в Монпелье, первый воспользовался этим наблюдением, чтобы воспроизвести изображение абсолютно прямоугольное на нашей сетчатке, отражая на ней образ, в виде гиперболической кривой. Профессор Пеш применил свое интересное открытие к кинематографу. Он спроектировал и установил экраны, которые вместо того, чтобы быть плоскими, представляют из себя гиперболическую вогнутость.

Вычисляя параметры, т. е. величины уравнений гиперболы, применительно к размерам экрана, можно получить идеальный экран, выгодные стороны которого заключаются в следующем:

1. Картины, изображенные на нем, дают верное ощущение третьего измерения, без видимого искривления.

2. Картины ясны во всех частях и их освещение равномерно, потому что экран занимает приблизительно фокусную поверхность об'ектива кинематографического аппарата.

3. Даже видимые с боковых мест и на близком расстоянии от экрана картины совершенно не кажутся неприятно искаженными, как это бывает при плоском экране.

4. Из этого следует, что продолжительный сеанс при таком экране совершенно не утомляет зрителей.

Это очень интересное достижение основано на опыте до сих пор неизвестного фактора—рельефного зрения: искривление образа, отраженного на сетчатке, посредством системы преломления лучей в глазу.

Эти экраны известны под именем глифографов, что обозначает—предметы, кажущиеся вылепленными на поверхности.

Figure 1.11 Diagram illustrating the relationship between intervals and phrases published in "We: Variant of a Manifesto" ("My. Variant manifesta") *Kino-fot*, no. 1, p. 12, August 1922. Courtesy, Vertov-Collection, Austrian Film Museum, Vienna.

elements of a film-object in common *compositional* terms. Vertov continues in his 1922 manifesto:

> WE fall, we rise . . . together with the rhythm of movements—slowed and accelerated,
>
> running from us, past us, toward us,
> in a circle, or straight line, or ellipse,
> to the right and left, with plus and minus signs;
> movements bend, straighten, divide, break apart,
> multiply, shooting noiselessly through space.
>
> Cinema is, as well, the *art of inventing movements* of things in space in response to the demands of science; it embodies the inventor's dream—be he scholar, artist, engineer, or carpenter; it is the realization by kinochestvo of that which cannot be realized in life.
>
> Drawings in motion. Blueprints in motion. Plans for the Future. The theory of relativity on the screen.
>
> WE greet the ordered fantasy of movement.
>
> Our eyes, spinning like propellers, take off into the future on the wings of hypothesis. (Vertov 1984: 9, emphases in the original)

As these statements suggest, Vertov's theory of the interval was implicated in the "orchestration" of an itinerary for not only a spectator's eye but also for the cinematographer's eye. However, if the theory of the interval still remains elusive, as it migrates between the compositional worlds of film frames with their complex dynamic of individual frames, shots and thematic cells, its material foundations are less cryptic.

The most basic and literal model for an interval is the gap that separates two adjacent frames in a mechanically produced frame sequence. This basic physical indicator of *difference* marks the frontier between still and cinematic images, between the photograph and the film image. This is the model that appears to operate as the *precondition* for the possibilities that are promoted by a statement like "Intervals (the transitions from one movement to another) are the material, the elements of the art of movement, and by no means the movements themselves. It is they (the intervals) which draw the movement to a kinetic resolution" (Vertov 1984: 8). It also seems to be a basic recondition for a comment like this one, in "From Kino-Eye to Radio-Eye" (1929): "Movement between shots, the visual 'interval,' the visual correlation of shots, is, according

to kino-eye, a complex quantity" (1984: 90), since shots are also delimited by the articulation of two frames in the form of a *splice*. For the correlations that Vertov identifies concern the structure of the individual image or the "fluid" trans-frame compositional structure of a shot, and its relationship to a different structure in the form of a different image or shot sequence; the basic precondition for each being the distinction—the interval—between two frames.

The film as object is composed of individual frames, with the interval functioning as a physical/conceptual mechanism of "mythic" articulation, governing and regulating the organization of the *space* of the film object/space of the subject matter's sequentially organized thematic/formal composition. Montage refers to the acausal *method* of choosing and acausal *method* of sequencing that subject matter in order to produce "the most expedient 'itinerary' for the eye of the viewer" according to "a simple visual equation, a visual formula expressing the basic theme of the film-object in the best way . . ." (1984: 91). In Vertov's case, it functions in relation to the acausal physical and compositional regulation of contents according to themes, whereas the interval governs the displacement/relocation of the illusion of *movement* generated between frames and shots *as defined by shifting visual displacement in the composition of the information encoded in those frames/shots*. A single 15-minute shot of a white wall would exhibit no discernible movement other than that produced by the film's emulsion grain, dirt, and scratches. However, insofar as montage operates on the basis of a fundamental physical difference between two frames—on the existence of a basic—"universal"—spatial *interval* between frames—the "cinematic interval" continuously shifts position (while remaining in the same basic structural position or location in relation to two film frames), and it therefore functions as a floating signifier of perceptual dynamics and kinomatic meaning. It is at times visible and at other times invisible. While this brief interpretation of Vertov's theory of the interval and its relationship to the practice of montage does not exhaust the interval's adaptive possibilities, as we shall see in the following chapters, it does provide a way to conceive of its multiple roles in the context of Kino-Eye practice. If Vertov seems to have limited his statements concerning the interval's fundamental role in organizing subject matter and composition to the film object itself, the concept of the interval can also be applied to Kino-Eye's system of observation/manufacture in a way that links the process of conceiving and manufacturing a film like *The Man with a Movie Camera* to its content and material foundations. This linkage provides a way to address *The Man with a*

Movie Camera's unusual social function and its radical propositions concerning human identity.

ii) From interval to identity

Vertov considered himself a "film poet" who "wrote" "on film" and who produced "poetic documentary film" (Vertov, "Notebooks, Diaries" (1936, 1934), 1984: 199, 183). Poetry, for Vertov, was kinomatic truth rooted in a dialectic between the visible and invisible; and poetic documentary film was the product of strategic "comparisons" of social behavior which aimed at the communist "decoding of life as it is" by way of a particular social technology of observation/manufacture that processed, structured, and organized visual information encoded on strips of film throughout "the entire process of film production" (1984: 197, 66, 88). As we have seen, this method was governed by a dialectical form of thought "most easily conveyed in film, through montage" ("Notebooks, Diaries" (1934), 1984: 175) which allowed for the exploitation of the inherent difference between two adjacent film frames—a difference basically defined (from the film stock's viewpoint) as an interval. From this point of view, an interval's physical existence literally materialized in the form of black bands between frames; and they could be perceptually erased (during a film's projection) or they could be animated and integrated in a film's composition (as in the example of the audience's introduction to the "mysteries" of the film's editing procedures, such as cutting and splicing along intervalic joints, in *The Man with a Movie Camera*). The cinematic interval—as opposed to the Vertovian interval—could therefore exist in a "passive" or an "active" state depending on whether its presence was acknowledged or negated. Vertov theorized its active existence through Kino-Eye and displayed its practical possibilities directly in thematic sections devoted to the film's editing and indirectly through, for example, the optical play generated by "flickering" window blinds, the rhythmic insertion of black frames during the rapid passage of railway lines with their ties, or the operations of traffic control (Figure 1.12).

However, if the interval could essentially be defined either in terms of a reductive binary logic of contiguous frames, or the "movement" triggered by calculated shifts in frame and shot composition, its ambiguous presence and miscellaneous functions could also be detected at all the levels of observation/manufacture. Insofar as a kinomatic social technology of observation/manufacture was conceived (and designed) to function as a process of

Figure 1.12 *The Man with a Movie Camera*. Editor cutting a film strip at the juncture of two shots.

production that extended from a basic level of observation to a final film product, interval-based montage operated as that system/technology's basic operational/organizational logic of linkage because of its implication in a film's manufacture from its conception to its thematic and perceptual reception. Since, one must not forget, in this latter connection, that Kino-Eye's ultimate objective was to produce a *transformative* political and social impact on the spectator's mind through the film's *perceptual/thematic* penetration of the latter's mental space.

Montage functioned as the dialectical semio-logic articulating Kino-Eye's social technology of observation/manufacture and as the backbone of its tripartite ritual structure. Vertov's theory of the interval provided a way to conceptualize the logic and structure of visual thematic connections, while it could also serve as a tool to integrate the montage stages that composed Kino-Eye's hierarchic social organization in terms of a film material's basic compositional cells; as if the concept of the interval was also a mechanism to multitask film's basic material, technical, cultural, and sociopolitical possibilities. On the one hand, this was minimally expressed, as previously noted, in the difference between two successive frames and, from *there*, "upon the movements between shots,

upon the visual correlation of shots with one another, upon transitions from one visual impulse to another" (Vertov 1984: 90). On the other hand, it also served as an éminence grise, in another definitional valence, within Kino-Eye's hierarchic organizational structure, which could also be understood as a process of orchestrating compositional/thematic elements *according to the increasing integration of systemic choices—options that were subject to adjustment through the actions of feedback circuits between different levels* (Figure 1.10). Thus the interval's presence could be detected implicitly at the moment that a film was conceived as a viable possibility and the first shots took shape in a director's mind (Figure 1.13). In this sense, Vertov had theorized a hierarchical, yet flexible and tentacular montage/interval-based culture of observation/manufacture, as opposed to having adopted the model of a specialized assembly line-based process of production, even if the latter form was adopted during editing because of the film material's inherent linearity.

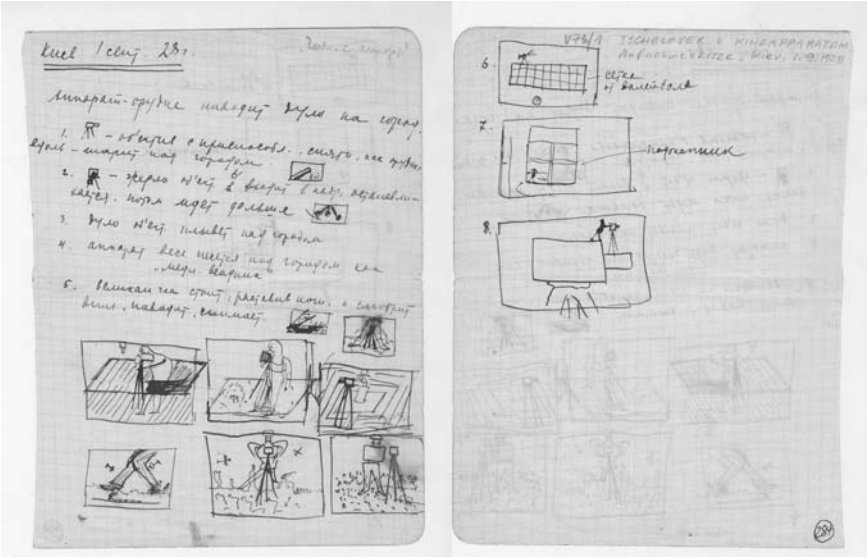

Figure 1.13 *The Man with a Movie Camera*. Fragments of a story board devoted to the movie camera's omnipresence in recording the activities of an urban culture. See Fischer-Briand (2006) for a discussion of the diagrams. Compare with Figure 8.2. Courtesy, Vertov-Collection, Austrian Film Museum, Vienna.

The Man with a Movie Camera. Giant movie camera and cameraman. The powerful opening symbol of Vertov's film that suggests that what the viewer is about to see is based on a machine for producing moving pictures and its vision of the world.

Instead of conceiving of a film like the *The Man with a Movie Camera* as an autonomous product of an individual mind or small group of like-minded people (note that the viewer is already doubly incorporated in its narrative and functions as the film's synthetic interpretative pivot between an interior and exterior space), it should be treated the product of a reflexively based feedback loop *between* stages of production and minds: more precisely as a collective sociopolitical ecology of "Mind" insofar as the film linked individual minds on the basis of common goals and themes and inasmuch as it functioned as a rite of passage towards a collective Soviet socio-political consciousness and non-Euclidean subjectivity that was modeled on the visual possibilities of its own system of observation/manufacture. From the viewpoint of reception, "Mind" materialized as a local cinema-based manifestation of what can be understood as a collective machine–based (kinomatic) *cybernetic* ecology that was generated and configured, in the case of *The Man with a Movie Camera*, through its ritually structured thematic/perceptual operations on a viewer/initiand who, along with the cameraman/film crew and editor were already embodied within the film's narrative space as film "actors," and therefore were already incorporated within its machine-based world.[30] To conceive of Kino-Eye and *The Man with a Movie Camera* in these terms is to open them up to a reinterpretation and re-assessment of their historical significance in relation to mid- and late-twentieth-century cybernetic models of the human/machine interface and the collective posthuman. When approached from this perspective, *The Man with a Movie Camera* can be treated as an experimental incubator for cybernetic identities—an incubator whose singularity resides in the fact that it functions as a rite of passage. It is therefore not just a question of information on different ways of living (Soviet vs Bourgeois) etc., it is also a question of how this information is package and delivered to a recipient in a way that already *includes* the recipient in the information package's organizational logic and culture. We are not just talking about a film, a fiction, or even a film embodying a science fiction proposition. *The Man with a Movie Camera is* structured to function in an altogether new way and in terms of a precise, if implicit objective. This is why *The Man with a Movie Camera* is more than a manual of Kino-Eye method. The film's structural/symbolic sophistication and its radical—prophetic—posthuman premonition are a function of its ability to operate simultaneously as a Soviet rite of passage *and* as a rite of passage toward a new collective condition of social existence, even though its proposals and ultimate "human" products are not cast in the same technical/critical language as mid-late-twentieth-century

descriptions of the cyborg or posthuman. In fact, from Kino-Eye's perspective, the rites of passage were synchronous in *The Man with a Movie Camera*'s case. How was this achieved?

As previously noted, the interval also served to link montage technique directly to the mechanical and photochemical foundations of the film process: to the photochemical creation of difference in the movement of individual frames through the film gate of a camera, and the reproduction of that difference in the movement of a film through a projector gate. Vertov's theory of the interval ensured a linkage and engagement between the evolving thematic geography of the film and a spectator's maturing consciousness by way of a specific perceptual itinerary plotted, as in the case of the *The Man with a Movie Camera*, under the aegis of the Camera/Eye. But this linkage-engagement extended backwards beyond the projector gate and forwards beyond the screen into a virtual mnemonic/historical space of the film's broad culture of production insofar as the film's production process was recorded within the film itself. The interval rendered possible the previously hidden world of documentary film production: its *raison d'être*, the lost worlds of each frame's conception/production as well as the *utopian* space of its reception with its promise of sociopolitical transformation. It also represented a future which *could* exist in the uchronic possibility of the alternative histories that each interval embodied as the presence of the absence of pictorial information that was either excluded from the final orchestrated visual/thematic experience or that never existed in the first place (that was excluded as a thematic possibility during the initial stages of observation/manufacture). Thus the interval was also the unacknowledged site of a dropout of information: an absence that was, in the case of *The Man with a Movie Camera* the precondition for the creation of meaning and the possibilities of sociopolitical transformation. It was this information dropout that made film and cinema possible by serving as the guarantee of the film's possibility to exist *as film*.

Note again, that *The Man with a Movie Camera* was not just any literary or theatrically influenced fictional film. It was a film that embodied its own progressive, reflexive cultural references, an advanced industrially framed transportation/communications matrix and logic, and a reflexive stance toward its own process of production. These features were presented during the course of the Camera/Eye's itinerary in urban/industrial spaces and the film's exploration of the cinema as privileged space of reception *and* site of perceptual/sociopolitical transformation (Figure 1.14).

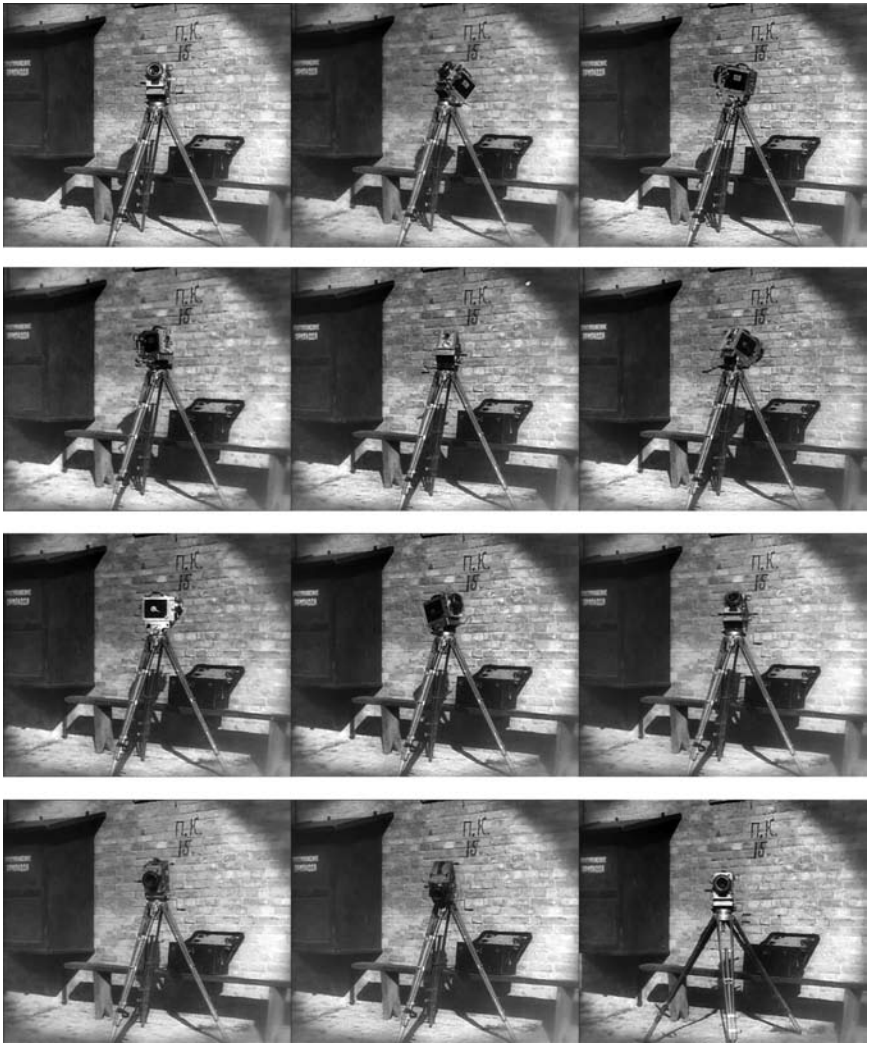

Figure 1.14 *The Man with a Movie Camera*. Stop motion camera/tripod animation.

In the process of reconstructing meaning, the audience, as both subjects and objects articulated in the context of a kinomatic rite of passage, would no longer find themselves excluded from the process of observation/manufacture that had constructed this kinomatic experience. At the beginning of *The Man with a Movie Camera's* rite of reincorporation sequence, the audience is introduced to the "real" author of the film: an anthropomorphized Camera/Eye (in the shape of an animated camera/tripod) that mimics human behavior (walking and bowing) but is composed of wood, metal, and glass. The presence of this figure celebrates

a cameraman's transformation into a posthuman body: its final form—an animated camera and tripod—symbolizing the "birth" of a new type of collective subjectivity and consciousness whose "representation" or identity pattern was not simply to be found in the dense factually based thematic interpretation Kino-Eye had forged in relation to contemporary Soviet society, but rather in Kino-Eye's simple and refined observational logic, *a logic that managed to articulate, as never before, a newly evolving socio-industrial space in terms of a previously unmapped kinomatic space*. Had this blueprint for a kinomatic rite of passage found social sanction with postrevolutionary authorities, Vertov's dream of an open-ended socialist vision might have found broader collective expression. Instead. Vertov's film was ultimately ignored—its revolutionary impulse to be subsequently legitimated within the context of an avant-garde aesthetic tradition, the product of the kind of capitalist system that Vertov had attempted to systematically undermine through Kino-Eye's theoretical and practical work. However, Vertov's dream remains symbolically embodied in the animated figure of the tripod/movie camera and its authorial claims over *The Man with a Movie Camera*'s content and ritual function.

Kino-Eye's logical excess: Vertov on the total collectivization of the human sensorium

In retrospect, the Kinoks were not considered, in theory, to be autonomous individuals with distinct identities. Their definition took account of the fact that they were extensions (when functioning as "kinok observers"), or active elements in semiautonomous observational modules (when they functioned as "kinok cameramen"). These modules were composed of two integrated components (movie camera and Kinok intelligence-human body) that composed a social, organically articulated optical/mechanical unit in a technology of observation whose *collective* kinomatic intelligence was compounded through physical and emotional bonding into a perfect bio-kinomatic consciousness. In terms of our current understanding of this linking of machine and human organism, the kinoks functioned, from theoretical and practical viewpoints, as *cyborg* prototypes: a kinomatically integrated "brain" that operated as an extension of a consciously reflexive observation/recording/manufacturing system. These prototypes were "designed" to operate cubo-futuristically within a conventional environment. More precisely, the Kinok cameraman unit was "designed" to

explore and expose a parallel cubo-futurist reality whose logic was predicted in the latest early-twentieth-century scientific theories, in particular the Theory of Relativity: A reality, in other words, that was not only a product of the observation/recording apparatus, its *modus operandi* and spatiotemporal possibilities, but was also built into it. It is worth noting again that kinok reflexive consciousness was *collectively* self-conscious—a condition cultivated in the context of the cameraman and its physical activity as controlled by a sociopolitical and aesthetic agenda that determined what theoretical and practical operations the collective system of observation/manufacture would focus on. This system and its meta-consciousness—whose dominant symbol was the Camera/Eye—accompanied and "educated" the audience through the activities of the kinoks during the course of *The Man with a Movie Camera*.

However, Vertov proposed that the Kino-Eye mode of organizing observation/manufacture could also be extended *horizontally* in order to link together other technologies of the human senses with the aim of transforming human thought itself:

> The theoretical and practical work of the *Kinoks-radioks* . . . have run ahead of their technical possibilities and for a long time have been awaiting a technical basis the advent of which will be late, in relation to Kino-Eye; they await the Sound-Cine and Television.
>
> Recent technical acquisitions in this area lend powerful arms to the partisans and workers of *documentary sound cinegraphy* in their struggle for a revolution in the cinema, for the abolition of play, for an October of Kino-Eye.
>
> From the montage of visual facts recorded on film (Kino-Eye) we pass to the montage of visual and acoustic facts transmitted by radio (Radio-Eye).
>
> We shall go from there to the simultaneous montage of visual-acoustic-tactile-olfactory facts, etc.
>
> We shall then reach the stage where we will surprise and record *human thoughts*, and, finally, we shall reach to the greatest experiments of direct organization of thoughts (and consequently of actions) of all mankind.
>
> Such are the technical perspectives of Kino-Eye, born of the October Revolution. (Vertov "Dziga Vertov on Kino-Eye, Lecture I" (1929), 1967: 101–2)

This short passage published in 1929, nine years after the word robot was introduced in Karl Capek's play *R.U.R* (Rossum's Universal Robots) and thirty-one years before the word "cyborg" was coined, proposes a collectively integrated

panhuman sensorium which could serve as a medium for the organization of the thoughts and therefore the actions "of all mankind."[31] There is a clear movement from an outside "visible" world to an implicit and invisible one plotted out by the activities of the kinoks, and then outwards again as that invisible, relativistic non-Euclidean world replaces the outer Newtonian one on-screen in the case of *The Man with a Movie Camera*. Vertov's proposal and its theoretical context allows one to map out the outline and hierarchic logic of a rational, factually based, panhuman *sociopolitics* of multisensorial representation and its ultimate stage of collective human/posthuman mutation. As Kino-Eye's elementary composite sense-organ became increasingly collectivized (a) through a trans-visual expansion in its montage- and interval-based organizational/manufacturing logics and (b) through its intimate working relationships with the technical/"factual" representatives of the other senses, its perceptual powers would be increasingly recalibrated and redistributed, but also strengthened through a process of multisensory "collectivization." Progressive, fact-based sensorial integration and montage-based dialogue would lead to a new multisensory sovereignty over the social spaces of an evolving Soviet culture, and beyond to a "direct organization of thoughts (and consequently of actions) of all mankind." A total, global reflexively conscious sensory ecology would not only reach into the depths of every citizen's mind in an unprecedented way—a precondition for its existence—, it would reformat and reprogram each mind in the name of a collective critically self-conscious panhuman Mind. Finally, as Kino-Eye's composite sense-organ became increasingly collectivized through its association with the other senses, and its powers were increasingly dissipated and recalibrated through sensorial interaction (collaboration), there would be a progressive erosion of its undisputed ability to claim scopic sovereignty over the social spaces of an evolving Soviet culture.

The model Vertov outlined in that 1929 lecture was, of course, directly patterned on Kino-Eye's organizational model for observational diffusion. However, at a final stage in Vertov's blueprint for a socialist reconstruction of the human sensorium, it would no longer be a question of coordinating and structuring individual observers so as to form a flexible and exceptionally mobile (agile legs, practical motorcycles, speedy cars, and powerful locomotives), multifaceted technology of observation/manufacture. There was now the suggestion of new sensory possibilities and a new range of perceptual transformations rooted in innovative collective patterns of identity emerging from a range of "intelligent," sensorially integrated human/machine interfaces. It is not surprising, therefore,

that a total—global—form of post- and panhuman thought would represent Kino-Eye's final threshold of revolutionary transformation, since protocyborgian translational circuits had already been prefigured in the structure and activities of its most "primitive," compact, and mobile observational unit: the Kinok "cameraman." In this sense, the ultimate Vertovian dream of the collectivization of the human senses and consciousness was reflexively programmed into the operational logic of the kinok unit, that basic unit of sociopolitical and aesthetic *praxis*.

Is it appropriate to claim that Vertov's pre-1930 theories and *The Man with a Movie Camera* propose a new articulation of the human organism and machine systems that is now known under the identity of the *cyborg*? Can one claim such a status for machines devoted to the recording of visual data on the basis of optical systems that mimic the structure of the human eye—an analogy that serves as an interface between the human organic and the machine-based system? Is it correct to link up this new identity with the posthuman via Vertov's theories of the collectivization of the senses? These questions can only be answered if we move forward to the 1960s in order to briefly explore the propositions promoted by a new discipline that emerged under the rubric of "Cybernetics" just after the Second World War (Hayles 1999).

In 1948 Norbert Wiener published a groundbreaking book entitled *Cybernetics: Or Control and Communication in the Animal and the Machine*. In addition to presenting the outlines of a new interdisciplinary science of communication and control, Wiener's book presented a model of the human organism and the machine system in which both are treated as equal. Wiener's model depended on three insights: the first concerned the role of the sense organs in the creation of a new stage in the history of automata; the second dealt with the fundamental role of feedback in regulating the behavior of living organisms and machine systems; and the third offered a new conception of the relationship linking message and organism.

Wiener proposed that one of the basic differences between older forms of automata, such as the seventeenth- and eighteenth-century clockwork automaton, or the nineteenth-century thermodynamic or steam-powered automaton, and the cybernetic automaton, was to be found in the way that the latter was *coupled* to an external world. Coupling was achieved not only through energy flow and metabolism, "but also by a flow of impressions, of incoming messages, and of the actions of outgoing messages." The "organs" for this exchange were considered, moreover, to be "equivalents of the human and animal sense organs" (Wiener

1961: 42). Thus, in contrast to earlier forms of automata (which were limited in their ability to communicate and interact with their environment), Wiener's cybernetic automata were able to exchange information with their environments and to assess that information in such a way as to modify future actions on the basis of past performance. Feedback, the name for this adjustment process, provided an even more fundamental way to establish common ground between living organisms and new communications machines, since it was by means of continual self-adjustment that entropy in both types of systems could be counteracted and controlled.

Wiener's third insight addressed the metaphoric relationship between *messages* and organisms. He proposed that an organism could be treated "as message" and, as a consequence, that one could describe an organism without trying "to specify each molecule in it," without having to "catalogue it bit by bit." Instead, one had only "to answer certain questions about it which reveal its pattern: a pattern which is more significant and less probable as the organism becomes, so to speak, more fully an organism" (1954: 95).

Pattern was, moreover, synonymous with message, and both were coextensive with information. Thus, messages, patterns, organization and information linked and regulated the behavior of living organisms, machine systems, and even social systems on the basis of a common cybernetic ecology. For the anthropologist Gregory Bateson, an early convert to the cybernetic paradigm, this ecology consisted of circuits of "ideas in systems or 'minds' whose boundaries no longer coincide with the skins of the participant individuals" (1972c: 339), and where "idea" was understood as "a difference which makes a difference" or, more simply, as a "unit of information" (1972b: 318). *The Man with a Movie Camera* was also a representative of this cybernetic paradigm, even though it would only be clearly formulated and theorized 20 years later. The film was the product of the sensory coupling of the cameraman/movie camera—an interface that was subject to collective/local feedback within Kino-Eye's hierarchic system/environment—and the system's montage-interval-based information economy where ideas and themes were articulated on the basis of "a difference which makes a difference."

The dissolution of the traditional conceptual boundaries between living organisms and machine systems that cybernetics inaugurated over 50 years ago suggests that *all* systems, including Vertov's Kinoks and his Kino-Eye organization, can be treated similarly. Wienerian cybernetics provides another way of conceiving the nature of a Kino-Eye, the Kinoks units and their kinomatic functions through

its equation of singularity, or the degree of organization (negative entropy), with the image of an island of life in a dying world. According to this analogy, Kino-Eye functions like certain organisms which can "for a time . . . maintain and often . . . increase the level of their organization, as a local enclave in the general stream of increasing entropy, of increasing chaos and de-differentiation" (Wiener 1954: 95). When coupled with an organism conceived as a pattern or set of messages and the movie camera (itself a pattern and set of cultural/epistemological messages) as vision machine devoted to recording visual date, the idea of Kino-Eye operating as a special type of collectively intelligent, distributed, reflexively conscious *system*—a communal *sentience*—makes cybernetic sense, especially since the more "significant and less probable" (1954: 95) its organizational pattern (hierarchic structure and montage-based division of observational functions etc.) and sociopolitical goals were—the more complex and extended its environment and thus its materiality—the more fully Kino-Eye could take on some of the primary characteristics of a living cybernetic organism. Insofar as the cybernetic automaton or cybernetic organism (cyborg) can be considered to be the systemic context of new collaborative sentience, the kinoks can be treated as the basic components of a transhuman *cybernetic meta-kinomatic* "organism" especially since it was not just energy flows, impressions, incoming and outgoing messages that counted as sentience, but also (and simultaneously) the movement of ideas in a Kino-Eye "system" functioning as an extended "Mind."

"Where does the blind man's self begin?" Gregory Bateson asks in a famous critique of the tendency to limit the functions of "mind" to the epidermic limits of the human body. "At the tip of the stick? At the handle of the stick? Or at some point halfway up the stick" (1972b: 318)? Does his mental system begin "at the handle of the stick?" At the limits of his "skin?", "halfway up the stick?", or "at the tip of the stick" (1972d: 459)? Clearly, as Bateson suggests, such questions are absurd. Conventional visual boundaries, including those of the human body, must be replaced by fluid and contingent *operational* boundaries. If one begins to think in these terms—and the radically of Vertov's Kino-Eye model and the propositions advanced by *The Man with a Movie Camera* encourage us to follow this train of thought—then Vertov's vision and his Kino-Eye model begin to take on a specific and prophetic form in the embryonic 1929 shape of a cybernetic organism, its machine vision, and all that it represents as the harbinger of a new form of posthuman identity.

Kino-Eye's name and collective identity, as well as the kinok's hybrid machine/organic nature suggest that they were indeed heralds of a cybernetic world

view. Hayles' theory of the splice is a useful reference here precisely because its literalism finds an appropriate reference in the splicing of film elements into a film "object" (Hayles 1999: 116–17, 120, 130). Her theory can also apply to the interval where the concept of the "splice" can serve literally and metaphorically to designate the juncture between frames that have been manually created by an editor, where the handmade (glued) splice is the pivot for the recirculation (instantaneous "retracking"/mutation) of information into meta-information (through the operations of montage praxis). It is therefore appropriate to treat Vertov's theory of the interval and montage theory in general as precursors to Hayles' theory of the splice. Montage "splicing" applies not only at the level of film frames but throughout the levels of Kino-Eye's hierarchic organization, from basic observation to a final film product of which *The Man with a Movie Camera* is the ultimate reflexive model. Vertov's film can similarly be interpreted as an integrated—meta-spliced—visual perceptual cyborg model where consciousness is reflexively integrated in a frame-based-mnemonic circuit, and where a new kind of subjectivity takes on the anthropomorphic identity of an animated camera/tripod, in order to communicate with an on- and off-screen-based public. This pictorial "agent" is, in fact, the representative of a collective meta-subjectivity (Kino-Eye) that is itself composed of dissipated or *distributed* subjectivities (kinoks).

Beyond the initial equation of the kinoks with a proto-cybernetic organism (cyborg) and Kino-Eye with a transhuman *cybernetic meta-kinomatic organism* composed of distributed subjectivities, the question of the nature and function of their identity patterns remains to be refined. Pattern suggests the residues of intelligent activity, the operations of intelligence, the presence of a message (or messages), and beyond these, it also points to the existence of a special virtual kind of memory or data bank. Bateson draws our attention to the necessity of including "relevant parts of memory and data 'banks'" in a definition of individual mind. But in this case, as he points out, the most basic cybernetic circuit exhibits memory "of a dynamic kind—not based upon static storage [as, for example, in the case of a film] but upon the travel of information around the circuit" (1972d: 459); or film + viewer. This concept of a spatially and temporally active memory is geared to the fundamental process of feedback: "The behavior of the governor of a stream engine at Time 2 is partly determined by what it did at Time 1—where the interval between Time 1 and Time 2 is that time necessary for the information to complete the circuit" (1972d: 459–60). Because this type of memory is differentially defined in cybernetic terms it is a selective kind of

active *virtual* memory that operates through a basic state of self-consciousness as defined by its feedback logic. Although the complex question of cybernetic memory and consciousness is something that cannot be further explored in this book, there is, nevertheless, an interesting question concerning this memory's status and function in the case of an organization like Kino-Eye and a film like *The Man with a Movie Camera*. If active memory is located within circuits and feedback loops, static memory is engraved in the formal structure of the system. This model sheds light on Kino-Eye's active/static mnemonic organization (information processing in the context of a formal organizational structure), or at least its utopian theoretical form as described by Vertov in his writings on Kino-Eye, and it provides an interesting interpretation of *The Man with a Movie Camera*'s ritual functions since it is possible to also treat a rite of passage as a feedback loop that functions in terms of the initiands it processes and their ability to replace the individuals who previously animated the ritual process in their capacities as the "keepers" of the knowledge archived by that ritual. By producing Soviet citizens or by simply serving as a "dislocated" rite of passage, through its capacity to be recuperated by experimental filmmakers of various kinds throughout the twentieth and beginning of the twenty-first centuries, *The Man with a Movie Camera* also has the capacity to "process" a new generation of filmmaker who can use Vertov's film, its methodology, or elements thereof, and even its thematic ideas (or references) as templates to develop other versions better adapted to the historical conditions in which a filmmaker is operating. They could also produce deviant versions that mutilate in one way or another the film's basic kinomatic logic and objectives.[32]

Is Kino-Eye a self-regulating system or a self-organizing system? Does Kino-Eye belong hypothetically (and in retrospect) to the first wave of cybernetics or to the second wave (Hayles 1999)? The answer is both depending on one's viewpoint. Insofar as it was a hierarchic organization devoted to producing films it can be treated as a self-regulating system based on a clear kinok-based distinction between observer and observed. If Kino-Eye was a first order cybernetic entity because of this distinction between observer and observed, and the fact that the observer is considered to be cybernetically fused with a machine (the movie camera) where the observer functions as active mind and the machine as a passive one, then *The Man with a Movie Camera* can be considered to be a prototypical example of a second wave reflexive system because of the way that it *embodies* a cybernetic system/observer (kinoks/movie camera) and observed (inhabitants of a Soviet metropolis circa 1929 *and* movie spectators who are

doubled in order to simultaneously occupy on- and off-screen space) within its transformative space. This classification is also supported by the fact that its ritual structure and function embody both its means of production and presentation (the cinema) which further reinforces it immanent auto-referentiality and ability to symbolically and physically occupy two (theater) spaces at once. Within the context of a cinema, the observational system is symbolically closed (the exits and screen always offer different ways "out") and its ritual functions are focused on the spectator. However, its ultimate transformational objective lies beyond the cinema's walls.

"Kino-Eye is learning" was Vertov's reply to a question by the poet Vladimir Mayakovsky concerning its progress in 1934 ("On Mayakovsky," Notebooks, Diaries (1934), 1984: 180). That assertion best sums up Vertov's attitude to his project: Kino-Eye learns, which means that the kinoks and their audience are continuously introduced to new mappings of reality and corresponding posthuman identities which would ideally continue to be generated along a continuum of technologies of representation until the October Revolution would consummate itself in a spectacular sensorial excess: a global kinomatic and open-ended rite of passage whose ultimate objective was to eclipse itself in the process of giving birth to a panhuman, posthuman sociopolitical consciousness.

"Object" lesson

There is one preeminent lesson to be isolated from Vertov's revolutionary but abortive experiment. *The Man with a Movie Camera* demonstrates how cultural artifacts such as films or other kinds of visual works can be structured in terms of powerful collective as opposed to individually tailored rituals. But it is also clear that simply structuring a work in terms of a rite of passage does not automatically guarantee that it will operate as a rite of passage if the relationship between its structure and content is not geared to collaborative/collective political, sociocultural objectives such as those that motivated Vertov and his colleagues during the first two decades of the Soviet experiment in Russia. *The Man with a Movie Camera*'s unusual organizational model, its montage-/interval-based logic, and range of thematically organized subject matter serve as a measure of its ambition to serve as an active—critically and reflexively engaged—witness of its revolutionary context of production and also of its capacity to embrace the future possibilities of the technologies and models of social organization upon

which it was founded. One has only to think of the presence of the cyborg in the scientific, academic, and popular imaginations (Gray 1996), or of the proliferation of powerful new imaging systems such as virtual reality which have the capacity to interface directly with the human sensorium and ultimately incorporate it, in one form or another, into a global information network, in order to appreciate *The Man with a Movie Camera*'s unique contribution not only to the history and theory of film as cultural artifact and historical document, but also to a history of machine vision.

It is also obvious that Vertov still has much to teach us about the relationship of theory and practice, the politics of representation, technologically mediated vision and its connections to social change, and the necessity of expanding our understanding of the relationship between social organization and technologies of observation in the case of mobile social practices. *The Man with a Movie Camera* encourages its viewers to remain sensitive to, and critically conscious of the relationships that can exist between machines, social systems, and their cultures. As Vertov's film demonstrates, visual analysis must be anchored in and structured by social processes in order to move beyond the basic stage of promoting awareness in a viewer /audience, even if an awareness of this kind is absolutely necessary as a first stage in a practice founded on sociocultural action and progress. *The Man with a Movie Camera* also poses and answers the question of whether film and art in general function as significant forms of social knowledge. *The Man with a Movie Camera* clearly demonstrates not only how this is possible but also what one must expect of such knowledge. It does so by raising the question of the role of a medium's materiality, its relationship to specific methods (montage) and intrinsic structural elements (interval), as well as operations on basic narrative cells (themes) in the *chronotopic* (Bakhtin 1981) construction of meaning, a question that is also posed in a different way in the case of experimental filmmakers like Snow in the 1960s and 1970s or Farocki in the first decade of the twenty-first century.

However, *The Man with a Movie Camera* also goes on to demonstrate how social, cultural, and political *potentials* (what it can and can't do in terms of social, cultural, and political analysis and transformation) and how aesthetic effects are structurally grounded in the medium's materiality *and its potential*, and how they can be structurally tailored to specific social and political ends only when one enters into a meaningful dialogue with a medium's specific properties. Finally *The Man with a Movie Camera* provides a provocative and innovative answer to the question of how a specific medium can be used to create

a meta-discourse on the relationships that exist between itself, other media and similar infrastructural technologies of transportation and communication. In this sense, it clearly demonstrates how any medium can be used to reflexively explore its own sociocultural, economic, and political, as well as its material conditions of existence and its possibilities, as well as those of another medium or network of media. From this viewpoint, *The Man with a Movie Camera* promotes a relational theory of media (Tomas 2012) that is defined in terms of a complex intersystem of technologies of observation and related image cultures whose impact on the human sensorium can be measured according to alterations in its sense ratios.

The impact of machine vision on the history of human consciousness has been noted and explored by Walter Benjamin and a number of contemporary theorists, notably Marshall McLuhan and Paul Virilio, among others. Benjamin, for example, noted the impact of media on the relationship between the human senses as did McLuhan almost 30 years later (Benjamin 1976: 222; McLuhan 1964: 61). Virilio (1989, 1994) has devoted considerable energy to describing the logistics of computing and militarized vision and their penetration throughout our social fabric in a way that rhetorically frames Harun Farocki's work. There is also the question of the history of surveillance, a point that I will return to in Chapter 8.[33] Clearly, Vertov's work on Kino-Eye predates the work of these theorists, and goes beyond them in the sense of actively seeking to promote new, meaningful experimental perceptual relationships and experiences through Kino-Eye's structure and activities. This includes embracing new sensory possibilities which might exist beyond the limitations of specific technologies and autonomous individuals, as in the case of his espousal of a military model for Kino-Eye, or his radical call for a collectivization of the human sensorium (whatever apprehensions or criticisms one might have, in retrospect, concerning his choice of metaphors).

If there are some important distinctions to be made between Vertov's kinomatic practice, as presented in *The Man with a Movie Camera*, and those of the other filmmakers like Snow and Farocki, as we shall see in the following chapters, then it is in the way that film is conceived to engage with, explore, and transform society at critical moments in its evolution. While Snow and Farocki also explore the perceptual, cultural, and sociopolitical mechanics of film production and machine vision, they engage with questions of media reflexivity in distinct ways and at different moments in history, with different visual results.

The Man with a Movie Camera's "anthropological" significance, as sociocultural artifact and ethnographic document, resides in its panhuman

ritual structure and its process and objectives which were/are engaged with the perceptual transformation of a spectator's consciousness. Vertov's film demonstrates, through an unprecedented concentration of cinematic techniques and deployment of visual/compositional strategies that film has the capacity not only to analytically expose the cultural logic of its social, cultural, and technical modes of production, but it also has the capacity to articulate it in innovative, experimental, and revolutionary social ways, as in the case of its posthuman proto-cybernetic and cyborgian propositions. In the following chapters, I will demonstrate how Snow's and Farocki's "post-Vertovian" films mine, update, and complete some aspects of Vertov's project as laid out in *The Man with a Movie Camera*, while falling short of consummating the film's revolutionary vision of an integrated socially and politically conscious filmmaking practice. While all cultural products reflect characteristics of the cultures that have produced them, there are few that mine, expose, and articulate those characteristics to the extent that *The Man with a Movie Camera* did. It is in this sense that one can argue that *The Man with a Movie Camera* presented its audience with an important "object" lesson in the critical possibilities associated with the design of a *social* imaging system of observation/manufacture. It also presented its audience with an object lesson in how to use a toolbox of cinematic techniques and visual theoretical/practical strategies to successfully link cinematic observation to social organization and both to the logical and material foundations of a film product. Moreover, this object lesson was reinforced through a kinomatic practice that was specifically designed to function in a period of rapid sociocultural and political change.[34] Its design functions as a model of how an imaging technology can be used not only to create and control a visual space for the presentation of a specific group of ideas about the potential non-Euclidean structure and collective sensory consciousness of a revolutionary industrial society, it also is *in itself* an organization of space, an inner space of critical social consciousness and the harbinger of a revolutionary posthuman identity and subjectivity.

What is the nature of this identity? Although Vertov did not conceive of Kino-Eye or the kinoks in cybernetic terms, they can be understood to function, in each case, as purpose orientated, self-regulating observational systems, with the former specializing in observation/manufacture and the latter in observation/recording. These systems were devoted to the recording and processing of visual information, either in terms of a human/machine interface (kinoks) or through different stages of organization from the targeting and collection of visual data to its montage-based processing (Kino-Eye). Clearly, these systems

cannot be considered to be *cybernetic* systems per se simply because the word and science did not exist in the 1920s. However, their functions (to record and process visual information—"ideas" concerning a represented world—from "selected" electromagnetic data), their literal (kinoks), and reflexive metaphoric and organizational machine-based integration (in both cases) point to a basic cybernetic logic. From a "cybernetic" viewpoint, Kino-Eye would "ideally" operate as an information processing system where the individual body was not treated as an autonomous entity but rather as an essential component in a camera-based observational unit. *The Man with a Movie Camera* can be understood to function as a meta-archive of the activities associated with these units as they ideally operated under the organizational command of Kino-Eye and its sociopolitical objective which was to produce a new Soviet citizen.

Finally, Vertov's work contributes to contemporary debates on media and media-based sociopolitical practices through his suggestion that a critical poetics is only possible at the cultural intersection of observational technologies which manufacture the "real" (clearly in Vertov's estimation, a floating signifier of the historical artifact "representation") and the comparative differences generated by fundamental contradictions inhering in particular cultural formations. For Vertov, it was this conjunction which gave political sense to Kino-Eye's activities and its proposal for new forms of social consciousness and identity. Perhaps this aspect of Vertov's legacy will prove to be the most enduring, since it motivates and gives conscious form to a critical, open-ended reflexive poetics. Today these contradictions are bound up with human organism's disembodiment as it interfaces in more intimate ways with the world of information through computing technologies and other kinds of machine interfaces from intelligent cell phones to intelligent credit and bank cards.

While production has given way to consumption as a cultural dominant and new technologies such as virtual reality threaten to redefine our sensorial landscape and, indeed, the very basis of our identities as human beings through its capacity to immerse a spectator in the most seductive, illusionistic environment to have been developed since the invention of cinema, Vertov's practice remains, to this day, a useful antidote and touchstone in the search for ways to foster new modes of looking, new ways of seeing ourselves and others. In the following chapters we will see how *The Man with a Movie Camera* and its rite of passage model can help us understand uniqueness of Snow's and Farocki's experimental posthuman "documentary" practices.

Part II

Enigma of the Central Region

A Microhistory of Machine Vision and Posthuman Consciousness, Circa 1969–72

By continuously embracing technologies,
we relate ourselves to them as servomechanisms.

Marshall McLuhan

2

La Région Centrale: Basic Cultural, Technical, and Formal Filiations

Michael Snow terminated the final version of his 180-minute, 16mm color film *La Région Centrale* in May 1971.[1] Snow was the director, producer, and script writer; Joyce Wieland, assistant director and still photography; Pierre Abbeloos, design and construction of camera activating machine, and cameraman; Jean Rival, sound editor; and Pierre Goussard, sound technician. The film was shot in Northern Quebec, near Sept-Iles, between September 27 and October 1, 1970.[2]

The film project was initiated under the working titles of "Landscape," and "Earth," before Snow finally adopted the title *La Région Centrale* for his 3-hour film (MSF-TLA, 9–7, Snow to Spencer, Draft letter, April 25, 1969; MSF-TLA, 10–4). In 1973 Snow noted that *La Région Centrale* was also a "working title" and that he had ". . . retained the french title (usually with 'The Central Region' in brackets) because of the pinch of appropriate foreigness to the film's almost totally English speaking audience and because to me there is a nuance of difference in the sense of it in French" (letter, Michael Snow to John Locke, August 21, 1973. Courtesy of John Locke).

La Région Centrale's shooting location, in a desolate geographic region situated about 100 miles North of Sept-Iles, had been chosen after extensive research, initially by car, then through consultation with government aerial photographs. The final location was pinpointed by helicopter survey. Snow's project was based on the construction of a special remote-controlled tripod-like machine capable of producing a 360° variable speed, multi-axis rotation of the movie camera. This special piece of equipment was designed and constructed to Snow's specifications, in Montreal, by Pierre Abbeloos, between June 1969 and September 1970. In order to achieve the effects desired, the machine was

Figure 2.1 The camera activating machine's installation in Northern Quebec 1970. © Michael Snow. Courtesy of the National Gallery of Canada, Ottawa.

constructed to correspond to the height of a human male body.[3] The 400 lb machine was airlifted to Snow's chosen location by helicopter where it was assembled and the film shot over a five-day period. Six hours of footage was produced during different meteorological conditions in daylight and at night (Figure 2.1).

The film was distinctive because of its bleak Northern Quebec subject matter, its structure, the complexity of its composition and its length. But it was also singular in the way that it simultaneously operated in between painting and film by using the question of the frame (boundary) and the two-dimensional surface (bounded rectangular field) as a common interface that created unique passageways between the histories of landscape painting, formalist painting, and experimental film. It's radically resided in the way it was able to updated each medium through that interface; and the key to its success resided in Snow's use of a remote controlled "camera activating machine."[4] Snow provided a detailed description of the camera activating machine, its function and its control and communication system in a 1970 patent-related document (Figure 2.2).

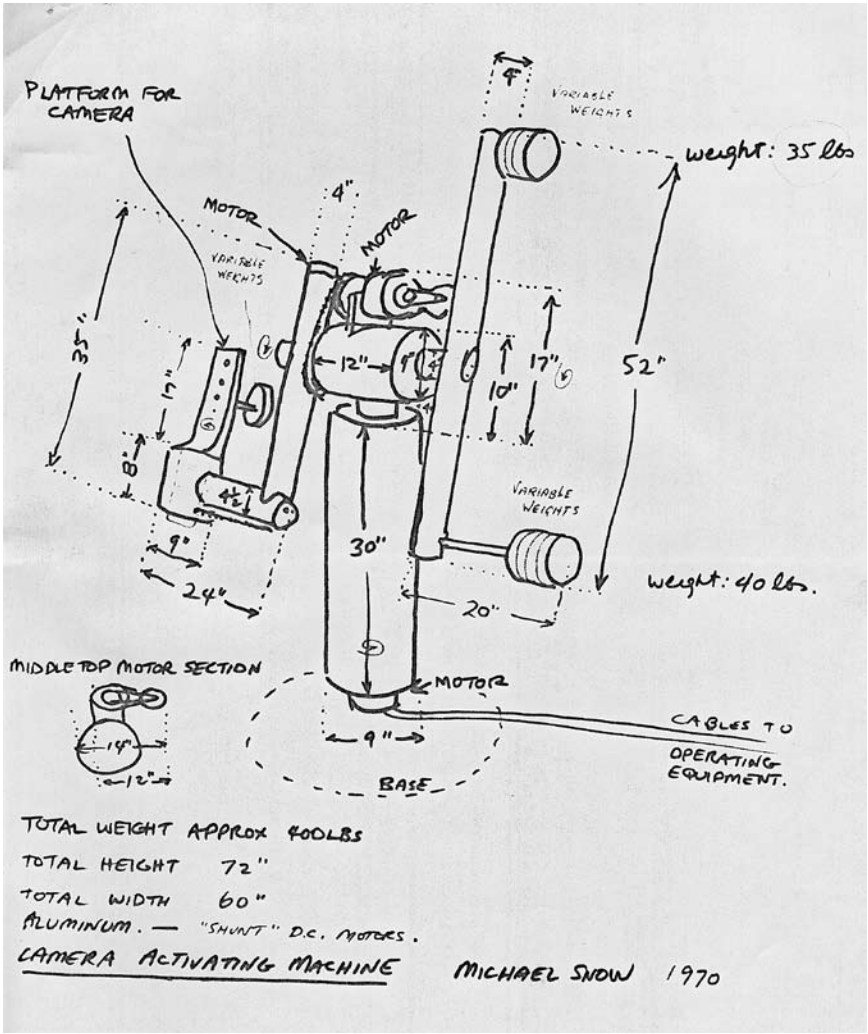

Figure 2.2 Michael Snow's diagram for *La Région Centrale*'s camera activating machine, 1970.

Source: MSF-TLA, 10–5, "Camera Activating Machine [La Région Centrale]" 1969–71. © Michael Snow. Courtesy of the Art Gallery of Ontario.

This machine can be equipped with any type of camera. Its first use was with a motion picture camera (16mm). The camera can be moved in any direction within a 360° spherical area by remote control. A zoom lens can also be controlled. A control panel which has switches activating the vertical, horizontal and rotation (centred on the lens) moves of the camera plus zoom lens plus speed of movement in each area can be operated remotely. A television camera

> may be added and the operator thus remotely monitor the movement. Programs of any repeatable identical camera movements may be composed by means of a system of instructions given the C.A.M. in terms of sound. Horizontal, vertical, rotation, zoom and camera motor are assigned tracks of 1 or 2 sound tapes (1/4," 16mm, 35mm etc.). A sine wave generator is set at determined frequencies which are passed through a "chopper" producing pulses of the frequencies ranging from slow to fast. This is the speed of movement information. The sound tapes composed to produce the type of movements desired. For example[,] a slow horizontal pan of 60º plus a fast vertical rise of 10º during the last 30º, including simultaneously a short zoom would be determined graphically and numerically (so many pulses = such a speed) and each necessary track composed. The movement in each plane is controlled by each having different frequency assigned to it. Each of these assigned layers is itself composed of 2 frequencies which are synchronously chopped (same speed) but are out of phase. The synchronicity of the chopping (which can be either + or -) will determine direction of movement. The number of chops or pulses will determine exact positioning ie. where the machine should start and stop. It is reliable and possible to record simultaneously 2 planar movements on one track eg. Frequencies 1500 and 300 plus 6000 and 1200. One track would be horizontal plus vertical (4 tones) [,] the 2nd would be rotation plus zoom (4 tones). Camera motor can be any frequency. The tracks are filtered in being played back to the C.A.M. The movements can be repeated without variation. The C.A.M. will not photographic itself. It must be cable joined to the operating equipment but could be radio controlled. It could also be easily joined to a "dolly" and its movements controlled as above. Its first use was from a fixed position in the film "La Région Centrale."[5]

Although *La Région Centrale* presented a 360º landscape-based visual experience as opposed to *The Man with a Movie Camera*'s dialectical analysis of a metropolis, it was equally ambitious and innovative. The similarities between the two films are therefore intriguing, notwithstanding their intrinsic political, social, and aesthetic differences.

Both films focus on the technical methods of cinematic representation, but they diverge in their subject matter and their sociopolitical and aesthetics objectives. They were produced in a way that engaged with the spectator's sensory apparatus, and both actively cultivated transformations in consciousness, or at least strategic shifts in consciousness that were linked to new perceptual experiences of common environments (the communication/transportation infrastructure and the daily economic and leisure activities of a metropolis in Vertov's case and a new way of looking at and experiencing a desolate northern Canadian landscape in Snow's case). Finally, both films proposed visual experiences that

could no longer be conveniently associated with the human eye's paradigm of natural vision. Instead, they were the products of the optical and perceptual possibilities of machine vision. Vertov's exploration of machine vision emerged, in *The Man with a Movie Camera*'s case, from Kino-Eye's unusual organization, its theories, the kinoks and their exploration of the movie camera's spatiotemporal possibilities within the context of an urban-industrial environment. In Snow's case, it took the form of his custom designed camera activating machine's semi-automatic interactions with a specific Northern Quebec location.

Snow described his project, its ambitions, and its relationship to his earlier films in an interview with Charlotte Townsend 1971. He declared that it was the outcome of his speculation ". . . on how you could make a real landscape film, a movie of a completely open space"—an observation that was interesting because of the way that pictorial realism (landscape) and conceptual abstraction (landscape conceived as a "completely open space") were overlaid in *La Région Centrale* to produce a unique visual experience (Snow 1971: 46). While this comment seemed to be a perfect representation of the film's "pictorial" logic, Snow proposed another way to define this "open space" later in the interview that was more radical in its formal and theoretical implications. He noted that he ". . .wanted to make a film in which what the camera-eye did in the space would be completely appropriate to what it saw, but at the same time, equal to it." His project was therefore an attempt to produce a film in which there would be ". . . a unity of method and subject" (1971: 46). A desolate open Northern Quebec landscape space provided Snow with a perfect environment in which to conduct a spectacular visual "experiment."

Snow traced the idea to an earlier film, *Standard Time* (1967), and the use of continuous circular and horizontal pans, and to their potential to produce ". . . powerful physical-psychic things." He proposed that his new film created the unusual situation in which the spectator was "spinning surrounded by everything," or, alternatively, where the spectator was "a stationary centre and it's all revolving around you" (1971: 46–7). As if to acknowledge the complexity of the visual experience, Snow then pointed out that the new work didn't have an "observable" center and that this absence was one of its defining characteristics:

> But on the screen it's the centre which is never seen, which is mysterious. One of the titles I considered using was *!?432101234?!* (an adaption of a sculpture title) by which I meant that as you move down in dimensions you approach zero and in this film, *La Région Centrale* that zero point is the absolute centre, Nirvanic zero, being the ecstatic centre of a complete sphere. You see, the camera moves

> around an invisible point completely in 360 degrees, not only horizontally but in every direction and on every plane of a sphere. Not only does it move in predirected orbits and spirals but it also turns, rolls and spins. So that there are circles within circles and cycles within cycles. Eventually, there's no gravity. The film is a cosmic strip. (1971: 47)

While the word "Nirvanic" pointed to an absolute form of mystic freedom, the word "cosmic" pointed, on the contrary, to the film's counterculture roots, where "trip" could easily become synonymous with "strip" (both suggesting, in their different ways, a separation process). Snow drew his audience's attention to the film's other unique qualities in an undated statement entitled "Notes from the filmmaker."

> LA REGION CENTRALE
>
> THE CENTRAL REGION is 3 hours wide.
>
> I'm not interested in: "It's 3 hours long but it seems like 30 minutes"
> I'm interested in: "It's 3 hours long but it seems like 30,000 years"
>
> This film is not "entertainment." It is a phenomenon. It can be an agent of revelation. To be fully experienced it ought to be seen/heard in its entirety. The middle hour is a plateau, the nature of which will be understood if crossed, i.e. by looking back from the other side of the end (an unusual opportunity).
>
> Take your time, take your place. It is to be expected that one will occasionally feel tangential. Stay, look at the image, but think of something else. Later, perhaps, you will find that you have enjoined the image.
>
> Very subtle sensual, sensory, and psychic states are possible by staying in THE CENTRAL REGION. If you must leave during the projection, please leave as quietly as possible.
>
> Michael Snow
>
> *Central* – relating to the centre, leading, principal.
>
> Region – tract of country, separate part of the world, etc.; sphere or realm; part around some bodily organ.

In another draft handout for his film, Snow invited his audience to

> COME AND GET HIGH,
>
> GET HIGH AND COME.
>
> . . .

He continued:

> THIS FILM WILL BE AN ENTIRELY NEW EXPERIENCE TO ANYONE.. . . THE FILM IS A MENTAL PLACE, AN INNER SPACE. IF YOU MUST LEAVE PLEASE DO SO AS QUIETLY AS POSSIBLE SO AS NOT TO DISTURB OTHERS. SEEING THE ENTIRE FILM WILL ANSWER A LOT OF QUESTIONS.
> UNLESS YOU SOON
> LET IT BE, GO ALONG WITH IT, PERHAPS
> WATCH IT BUT FORGET IT, THINK OF SOMETHING
> ELSE THEN RETURN YOUR ATTENTION TO IT.
> THE FILM IS A MENTAL PLACE, AN INNER SPACE.
> SEEING THE ENTIRE FILM IS THE ENTIRE SCENE . . . ("Screening of La Région Centrale" 1971–5, MSF-TLA, 9–6. Snow's deletions in the original have been excluded)

Snow captured, in these descriptions, the complex essence of his film's formal perceptual logic: its allusive roots in drug-based experiences, its oblique references to the training programs and early space walks of the Soviet and American space programs of the period, and, most importantly, its connections to an immersive, gravityless cosmic dimension of human experience that existed beyond the traditional frontiers of history.[6]

La Region Centrale's cosmic ambitions were shared by other major late 1960s/early 1970s artistic projects such as Smithson's *Spiral Jetty* (1970) and Robert Morris' *Observatory* (1971–7). Psychedelic rock concerts provided the environments for another form of immersive cosmic experience, as did the drug culture of the time. *A Rock and Grass Festival,* an early suitably punning subtitle for Snow's film (1971: 47), points to its kinship, in particular with rock concerts and their communal and immersive coming together of a large body of like-minded people. One legendary London venue was the Camden *Roundhouse*, a circular railway turntable/storage facility that had been built in 1846. Its open, "central space" with its domed architectural form served as a perfect environment for some of the most successful multimedia psychedelic concerts of the mid-to-late 1960s/early 1970s, with their amplified immersive sound and projected liquid light effects. If Snow's pseudo-immersive *screen-based* experience excluded the spectator, then it nevertheless created the perceptual *effect* of an immersive environment in his/her mind. Space travel, lunar landscapes, and

rock concerts were references that were present in Snow's mind during the film's planning stages.[7]

Thus two dominant 1960s/1970s cultural references were cleverly associated with the activities of a small group of like-minded filmmaking "activists" and assistants who were engaged together in producing a unique filmic experience.

Multi-screen immersive environments were produced by artists and experimental filmmakers in the mid-to-late 1960s.[8] One of the most sophisticated and technically complex of these immersive projects, the celebrated Pepsi-Cola Pavilion, was designed by Experiments in Art and Technology (E.A.T.) and its collaborative team of artists, engineers, and scientists for Expo '70 in Osaka, Japan.[9] The main space of the pavilion—the Mirror Dome—consisted of a 90 foot diameter, 210° hemispherical mylar mirror (Lindgren 1972: 29–40; Garmire 1972: 196–206). The "optical" and visual experiences produced by the Pavilion and *La Région Centrale* were fundamentally different, even though they shared a common immersive ideal. The Pavilion's Mirror Dome was designed to create real virtual images of spectators that floated in the space between the floor and mirrored roof the height of which depended on the spectator's position in space. *La Région Centrale* was, in contrast, the product of a movie camera that moved ". . . around an invisible point completely in 360 degrees . . . in every direction and on every plane of a sphere." While the Mirror Dome physically encompassed the spectator, Snow's film was designed for a traditional theater, with its convention of direct frontal viewing. Yet *La Région Centrale* was able to trigger physiological effects that mimicked a body's sensory responses to a gravityless open-ended three-dimensional space: *All of this within the confines of an individual mind*, within the confines of a dark—essentially dimensionless—theater environment.

The distinction is critical and sets Snow's work apart from products of new media-based artistic activity and research of the type pursued in the case of the Pepsi-Cola Pavilion. As Snow acknowledged, "My work is classical in the sense that it involves a definite directing of one's concentration."

> The single rectangle can contain a lot. In *La Région Centrale* the frame is very important as the image is continually flowing through it. The frame is eyelids. It can seem sad that in order to exist a form must have bounds, limits, set and setting. The rectangle's content can be precisely that. In *La Région Centrale* the frame emphasizes the cosmic continuity which is beautiful, but tragic: it just goes on without us. (Snow 1971: 46)[10]

There can be no clearer statement about the importance and function of the frame in Snow's work, and his singular metaphor of the frame as eyelid brings to mind *The Man with a Movie Camera*'s Camera/Eye metaphors, and especially the analogies between the seeing, blinking eyes, opening and closing window blinds, and the movie camera's shutter at key moments in the film. However, Snow's reference to images continuously flowing through the fame/eye lid points to *La Région Centrale*'s implicitly present, inherently static individual frame—the one that the periodic Xs bring into focus—the one that is most clearly represented by the equally static rectangular screen, the one that is also common to *The Man with a Movie Camera*. Morevoer, Snow's machine imposes an inherently Möbius-like "causality" to image production, as opposed to a more fragmented, relativistic nonlinear, acausal (montage-based) form of image production in Vertov's film. And yet, in both cases, the eye and its mechanical equivalent (movie camera) and surrogates (film frame and screen) are not only implicitly or explicitly conceived as a set of interlocked key symbols but they represent the bio-cultural and bio-mechanical logics upon which each film's conditions of existence are reflexively built and acknowledged. This reflexivity was differentially inflected in the service of pedagogy (Vertov) or firsthand (machine-based) experience (Snow). The Pepsi-Cola Pavilion was, in contrast, a product of the dissolution of the traditional frame and all that it implied for the spectator's sublimation in a new corporate-sponsored entertainment environment. If Snow's allegiance to a traditional theater model avoided such a dissolution, he was nevertheless able to explore the traditional frame's untapped "immersive" possibilities in an unprecedented manner.

At the time that it was produced, *La Région Centrale* was the most ambitious of Snow's investigations of the technical foundations of the film image when considered from the viewpoint of the movie camera's optical/mechanical possibilities. *La Région Centrale* was conceived as a catalog of camera *movements*: ". . . a 3 hour film 'orchestrating' all the possibilities of camera movement and the various relationships between it and what is being photographed" (MSF-TLA, 10–4, Landscape (Earth), typescript, p. 1).

Machine-based spatial possibilities and spatial relationships: these were the keys to *La Région Centrale*'s novelty. Its principal innovation consisted in the *apparent* neutralization of the filmmaker's authorial presence and his replacement by a mechanized surrogate whose actions were controlled by a predetermined script. However, the author was not neutralized and replaced by pure machine intelligence. He was simply displaced. In reality, Snow would control the camera's

movements through a program (a script) and also through improvisation via a control panel composed of three identical control units (camera, vertical, horizontal) each with a dial (speed) and toggle switches (forward, reverse, stop).[11] But the film was also ambitious in other complementary ways. Speaking of *La Région Centrale*'s length, for example, Snow noted, in reference to the northern Quebec landscape, that since it was a "big space . . . it needed a big time," and that the latter was "manageable:" "Three hours isn't *that* long. You can see three hours" (Snow 1971: 47, emphasis in the original). The film's often noted transcendent qualities lay in its capacity to sublimate time within the linear matrix of its geometric spherical movements. (Snow would acknowledge an inspiration in great religious works such as Bach's *St. Matthew Passion*, *Mass in B Minor, St. John Passion, and The Ascension Oratorio* (47).) Time's materialization within the film strip's space, as traced out by the camera's circular movements (reinforced as it was by its compressed day/night/day construction), defined *La Région Centrale*'s unusual immersive visual experience and its particular machine-based, transcendent cosmic environmental "realism."

Besides the important question of the frame and the film's classic cinematic mode of presentation, Snow provided additional details concerning his ongoing exploration of the camera's spatial possibilities as a function of subject matter in his 1971 interview with Charlotte Townsend.

> As a move from ←——→ [*Back and Forth*, 1969] I decided to extend the machine aspect of film so that there might be a more objective feeling, you wouldn't be thinking of someone's expressive handling of the thing but perhaps how and why the whole thing got set in motion, what's behind it. In both ←——→ and *La Région Centrale* once it is set up it keeps on going. The camera itself is a machine so attaching it to another, personally designed machine seemed a way of augmenting its possibilities. In this case I was composing for a very special instrument. The piano is a machine too. (1971: 47)

"Augmenting" the *camera*'s possibilities and composing "for a very special instrument" point to the sources of the film's underlying conceptual logic as well as to the inherent contradictions in the spatial approach Snow had chosen to explore in this new film. Augmentation, the automation of camera movements and yet the treatment of the camera-mechanism as a musical instrument whose movements would be "scored" and indeed improvised created an ambiguity that placed *La Région Centrale* between different worlds, even as these worlds

were dissolving in the various approaches proposed by the New York avant-garde artists of the late 1960s.[12] Central to *La Région Centrale*'s ambiguity was the perennial question of the frame, its characteristics and boundaries and the related question of composition (the organization of subject matter), whether manual, automatic, or a combination of both.

As previously noted, Snow's project was designed to produce a purely cinematic experience—that is, a frontal, rectangular, frame-based visual engagement with the image—even though he was one of the most polyvalent artists of his generation with a respectable professional music/improvised jazz career, a formation in painting, and a visual production that ranged from painting and sculpture to film and photography. However, the axis that linked the different facets of his multidisciplinary practice was experimentation: probing the question of the frame and its possibilities across different media; and using improvisation, as in the case of his music. It is therefore not surprising that Snow was categorical about the experimental nature of his films. They weren't "just a kind of documentation of a thesis," they were "experiences: real experiences even if they are representational."

> The structure is obviously important and one describes it because it's more easily describable than other aspects; but the shape, with all the other elements, adds up to something which can't be said verbally and that's why the work *is*, why it exists. There are a lot of quite complex things going on, some of which develop from setting the idea in motion. The idea is one thing, the result is another. (1971: 47, emphasis in the original)

Setting the idea in motion would set the conditions for a process to unfold and an unforeseen result to become both visual and audible: sensorially tangible, if beyond direct apprehension.

However, Snow's assertion about "setting the idea in motion" and his observation that "The idea is one thing, the result is another" raises an interesting question about the presence of intellectual and methodological filiations (as opposed to the cultural filiations I have just noted) because of the way that it echoes, if only obliquely, one of the central tenets of Sol LeWitt's influential definition of conceptual art—that the basic method for the production of a certain category of conceptual artwork is to be found in the *automation* of an idea with the emergence of a final product marked by the exhaustion of that process. Snow's assertion about the "result" is also interesting because of its insistence that once the idea is set in motion, the result cannot be treated as visually equivalent

to the initial idea, nor can it be simply reduced, through reverse engineering, to its mechanical origins because in the real world the pathway was always subject to "parasitic" activity.[13]

LeWitt's definition was first presented in his seminal 1967 *Paragraphs on Conceptual Art* where he argued: "In conceptual art the idea or concept is the most important aspect of the work. When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair."

> The idea becomes a machine that makes the art. This kind of art is not theoretical or illustrative of theories; it is intuitive, it is involved with all types of mental processes and it is purposeless. It is usually free from the dependence on the skill of the artist as a craftsman. It is the objective of the artist who is concerned with conceptual art to make his work mentally interesting to the spectator, and therefore usually he would want it to become emotionally dry. (LeWitt 1978: 166)

Snow's articulation of the word "idea," as presented in his 1971 interview with Charlotte Townsend, is less radical in its implications than LeWitt's, especially when compared to the word's basic role in calibrating the visual language of much of the text-based conceptual art of the late 1960s. The distinction between these two conceptualizations of the idea as machine becomes clearer when one takes into account Snow's insistence on the uniqueness of the spectator's artwork-mediated *experiential* sublimation. However, one can argue, from another viewpoint, that the question of a programmed, visually mediated conceptual experience is posed in a different and no less radical way in Snow's films and visual works of the late 1960s/early 1970s; and that LeWitt's definition offers another way to comprehend the programmed yet intuitive logic behind the idea of the camera activating machine's use in *La Région Centrale*. This alternative interpretation of Snow's film places it in an interesting relationship with the advanced anti-retinal text- and program-based works of the late 1960s and early 1970s.

Thus, even if one takes account of the liberal circulation of key words like "idea" in the New York art world of the late 1960s, and if one accepts, as another consequence, the word's widespread conventional use as a means of identifying the point of departure in a sequence of events that transform "ideas" into cultural artifacts (as in the case of "setting the idea in motion . . ."), Snow's *use* of the word resonates with the LeWittian tenets of conceptual, idea-based artworks of the period.

Snow's insistence on the nondidactic nature of his project as well as its intuitive roots and unpredictable results also resonate with LeWitt's definition of conceptual art and reinforce the connections between process-based conceptual art and Snow's machine- and camera-based program as summed up in *La Région Centrale*. These correspondences place Snow's project and his general "structuralist" and technically based approach to filmmaking within the orbit of a LeWittian definition of conceptual art, while his actual practice and *La Région Centrale*'s phenomenologically based visual/aural experience exceed its parameters in a conspicuously overdetermined way as machine vision was processed through, fused with, and took new "form" through its contact with a specific desolate kind of landscape environment, subject of course to the kinds of parasitic undercurrents that a complex technical project would automatically engender throughout its extended, multifaceted semi-automatice and improvised process of production as the initial idea for an ambitious landscape film was transformed into a final product.

However, it is in relation to the question of the automatic foundations for the generation of works based on ideas that the correspondences between *La Région Centrale* and LeWitt's conceptual art program are of particular interest. The parasite's activities point to the unpredictable and therefore irrational products of the automation of ideas, as opposed to their intuitive skill- and manually based cultivation. As Snow pointed out in connection with ←——→ (*Back and Forth*), "The film has a time of its own which overrides the time of the things photographed" (1971: 47). This comment reveals Snow's astute understanding of the unforeseeable possibilities of the "systems" that he was developing in the late 1960s. *La Région Centrale* expanded on the mechanical and temporal possibilities that were exposed by ←——→ and *One Second in Montreal* (1969), in particular in regard to the relationship between the mechanized treatment of the image (←——→) and duration (*One Second in Montreal*). As he pointed out, "In ←——→ there's the possibility of such a fusion [of opposites] being achieved by velocity.. . . *La Région Centrale* continues this but it becomes simultaneously micro and macro, cosmic-planetary as well as atomic. Totality is achieved in terms of cycles rather then action and reaction. Its *above* that" (1971: 47, emphasis in the original). Snow sought out systemic mutations.

Snow went on to describe the film's objectives in the more phenomenological terms of presenting ". . . the clearest dialogue between what one identifies as 'sky' for example, and the actual, physical effect on the eye-mind of the projected moving light image." That dialogue pivoted on the question of location.

> *La Region* isn't only a documentary photographing of a particular place at various times of the day but is equally and more importantly a source of sensations, an ordering, an arranging of eye movements and of inner ear movements. It starts out *here*, respecting the gravity of our situation but it more and more sees as a planet does. Up downs up, down ups down, up ups up. The first 30 minutes shows us the four people who have set the camera and machine in motion doing various things, talking, looking, but after that we are gone and the remaining two and a half hours is entirely made by the machinery [you?]. There are no other people but you [the machinery?] and the extraordinary wilderness. Alone. Like a lot of other humans I feel horror at the thought of the humanizing of the entire planet. In this film I recorded the visit of some of our minds and bodies and machinery to a wild place but I didn't colonize it, enslave it. I hardly even borrowed it. (1971: 47, emphasis and square brackets in the original)

The location was chosen for its specific geo-ecological characteristics and allusive political significance coupled with a minimum degree of accessibility: a "complete wilderness with nothing man-made visible, yet it had to be relatively accessible because of the budget and heavy but delicate equipment, four people, etc." (1971: 47) (Figures 2.3 and 2.4).

However, the location was "staged," in the sense that a specific site was chosen with the intention that the camera activating machine would play out its script *there*. Then, a human (film crew) and technological (helicopter, etc.) infrastructure was deployed in order to ensure a successful encounter between script, machine, and landscape environment. Thus, if the location was promoted as a "complete wilderness" and the camera movements appear to be autonomous, then this was only because they were the effects of a carefully orchestrated illusion. The environment was real of course, and it was wild, but Snow was and remains the film's author in the sense of choosing a geographic stage—*a frame*—("complete wilderness with nothing man-made visible") for his remote controlled machine-activated camera and he was responsible for its choreographed movements through space as well as for "its" improvisations. Although this might seem to be an obvious and pedantic observation, it has an important impact on how *La Région Centrale* is experienced and read in relation to *The Man with a Movie Camera*. If it is important to note that *La Région Centrale*'s spatiotemporal logic was initially programmed by a score that was produced by Snow (Figures 5.2b, 5.3, 5.4), and that Snow improvised on location and that the resulting cans of film were edited, then it is also important to note that *La Région Centrale*'s visual/phenomenological experience was produced by the *inconsistent* application of a

Figure 2.3 The camera activating machine's installation in Northern Quebec, 1970. © Michael Snow. Courtesy of the National Gallery of Canada, Ottawa.

Figure 2.4 The camera activating machine's operational film crew. © Michael Snow. Courtesy of the National Gallery of Canada, Ottawa.

program. I will return to the overdetermined historical composition of Snow's "ecological" stance in relation to the "uncolonized" spaces of Northern Quebec later. However, for the moment, I would like to concentrate on the *La Région Centrale*'s underlying mechanical logic and the resulting cinematic experience that it produced, especially when considered in relation to *The Man with a Movie Camera*.

Basic technical parameters and filiations

Snow explained the motives behind his proposal to construct an elaborate remote-controlled camera activating machine in April 1969. The text described a film entitled *Landscape* (that was later retitled *Earth* before Snow settled on *La Région Centrale*) and it provided an initial, yet clear idea of the nature and functions of Snow's camera activating machine, or semiautomatic tripod.

Snow noted that it was after he had finished *Wavelength* (1967), a film based on the idea of a single camera movement (the zoom) that he ". . . realized that the movement of the camera as a separate expressive entity in film" was "completely unexplored" (MSF-TLA, 10–4, "*La Région Centrale* Original Outline, Application, etc." 1969–70, "Landscape (Earth)," 1969, 1). He observed that camera movement was traditionally "allied to the dictates of the story and characters being presented and follows what has been assumed to further these things e.g. someone leaves the room, the camera follows this action." Snow proposed, on the contrary, to ". . . give the camera an equal role in the film to what is being photographed," because, he claimed, "The camera is an instrument which has expressive possibilities in itself" ("Landscape (Earth)," 1969, 2). This claim not only had important consequences for his film, it clearly, if implicitly linked Snow's project to *The Man with a Movie Camera*.

Vertov's film was based on a similar insight concerning the unexplored potential of the camera and its possible use as the main subject matter or character in a film. However, Vertov's movie camera was the principal agent in a social and political adventure, while Snow's camera was a hidden protagonist in the quest for a transcendent cosmic unity, or "*participation mystique*" (Snow 1982/3: 41, emphasis in the original). Both filmmakers focused, notwithstanding their diverging goals, on the camera and made it the principal subject of their films, and both were interested in producing radical visual statements on the basis of the camera's untapped potential vis-à-vis its autonomy. While Vertov

chose to integrate the camera/cameraman in his film by promoting them to the status of principal actor, Snow, in contrast, partially liberated his camera from its traditional relationship with the cameraman *but not necessarily the director*. With hindsight, one can see how Snow also transposed Vertov's animated camera/tripod into a real world Northern Quebec location which was conceived as a kind of circular theater stage.[14] The analogies between the two types of animated tripods are not fortuitous because functionally equivalent (Figures 2.5 and 2.6).

John Locke was perhaps the first writer to note an analogy between Snow's camera activating machine and a conventional tripod in the first of two influential 1973 articles on *La Région Centrale*. In that article, Locke argued ". . . that there are no names for the camera movements in *La Région Centrale*." He continued: "Although movements from tripods are usually called pans and Snow's film uses a tripod-like device, the movements in his film do not often look like pans" (Locke 1973a: 71, n1). Although Snow avoided the term tripod in his early descriptions of the camera activating machine, he did obliquely refer to it in a 1990 draft of a lecture on *La Région Centrale* and *De La* where he noted the functional equivalence between the tripod and the human body, the tripod head and human neck, in the context of a discussion of the origins of *La Région Centrale*'s camera movements.[15]

Regina Cornwell also described Snow's camera activating machine as a tripod in a 1980 discussion of its filiations with ←——→ (*Back and Forth*) and *Wavelength*:

> In ←——→ the camera is mounted on a tripod and moves continually. In *Wavelength* only the zoom lens of the tripod-mounted camera moves. *La Région Centrale* incorporates both pans and zooms. Its mount acts as a tripod and at times as a kind of small crane enabling the camera attached to a shaft to move out from the centre of the base up to four feet in any direction—up, down, around, across. What results are combinations of movements which are unique to film. (Cornwell 1980: 110–11)

However, in an interesting divergence from the camera-tripod analogy, P. Adams Sitney refers to it as a "miraculous equatorial mount" thereby emphasizing its celestial connections (Sitney 1979: 383).[16]

Snow's camera activating machine was also constructed to correspond to the height of a human body (Figure 2.1), and therefore embodied its own set of anthropomorphic qualities and references which tie it, as I have previously suggested, to Vertov's animation in suggestive ways.[17] While the results, as in

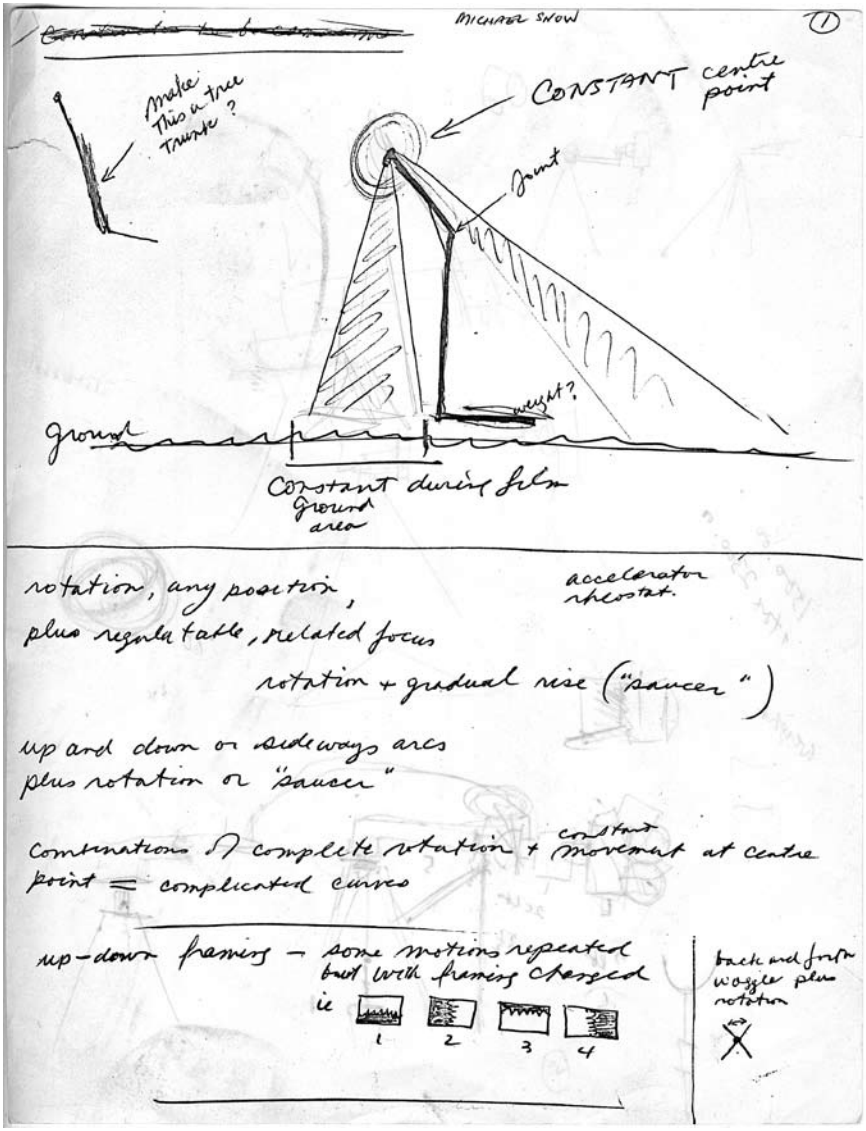

Figure 2.5 Early ideas for the camera activating machine. Note the focus on rotation. Recto (compare to Figure 1.13).

Source: MSF-TLA, 9–7, "Earth" [La Région Centrale], 1969–72. © Michael Snow. Courtesy of the Art Gallery of Ontario.

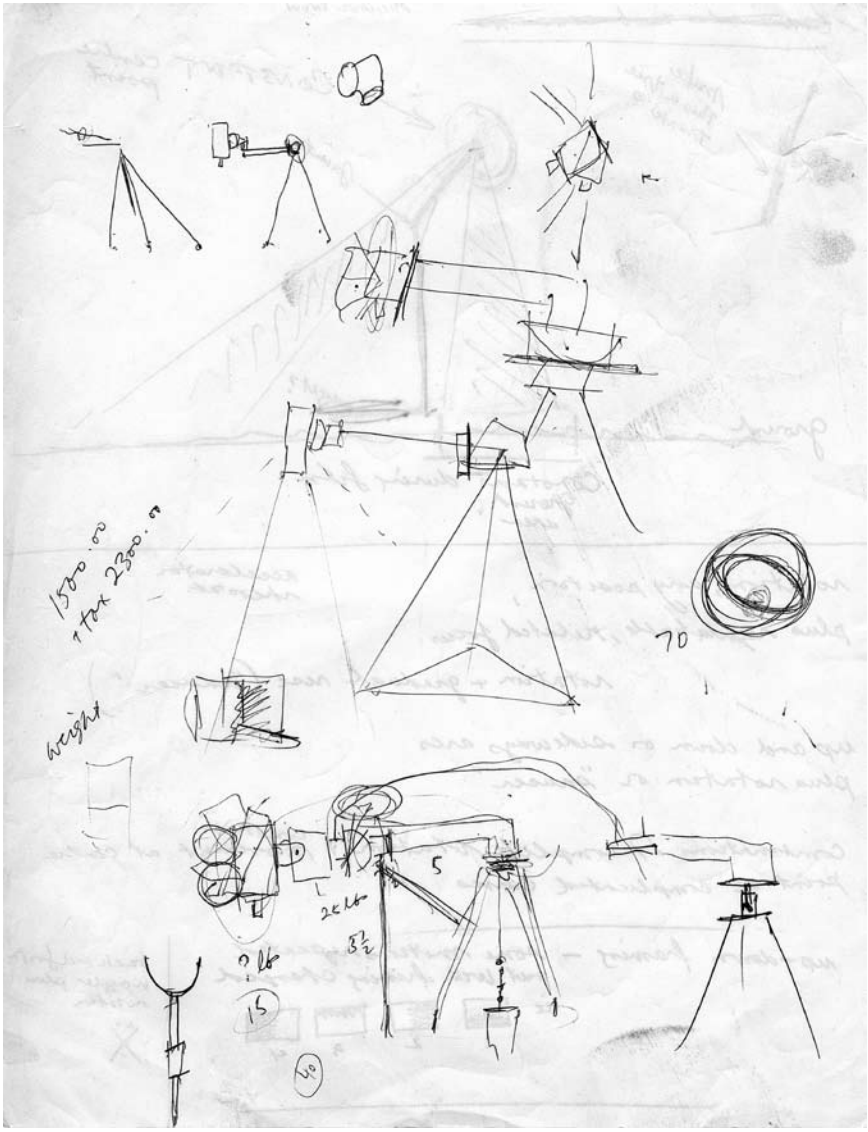

Figure 2.6 Early ideas for the camera activating machine. Note the focus on the question of articulation. Verso (compare to Figure 1.13).

Source: MSF-TLA, 9–7, "Earth" [La Région Centrale], 1969–72. © Michael Snow. Courtesy of the Art Gallery of Ontario.

the case of Vertov's film, were "de-anthropomorphized" camera movements (Elder 1989: 391), the correspondence tends to undermine Snow's claim to have liberated his film from the human body. But the relationship between the two was complex and allusive since the film experience encompassed the spectator in a way that negated any obvious correspondence. The eclipse of the camera activating machine's presence in Snow's film created a void, an unexplored place that nevertheless had a name—*the central region*—for the spectator's experiential re-location. *La Région Centrale*'s antigravitational experience can be interpreted as an updated 1960s version of Vertov's metaphoric, aeronautically liberated camera (Vertov, "We: Variant of a Manifesto," "Kinoks: A Revolution" 1984: 9, 19). However, in place of the kinok pilot and his camera, Snow proposed an experience that evoked that of an astronaut floating in space in a space capsule (the theater).

Treating *La Région Centrale*'s camera activating machine as an elaborate remote controlled tripod allows one to trace Snow's engagement with the language of the movie camera beyond the camera itself in such a way as to integrate the tripod into its "system" thereby expanding, in a significant way, the question of what constitutes the mechanical basis of a camera language. It also allows one to trace the technical origins of the camera's movements in films like ←——→ (*Back and Forth*), *La Région Centrale*, and *De La* to a common mechanism that is not normally treated as an integral component in the camera-system's language. Finally, it links all three to Vertov's Kino-Eye project and *The Man with a Movie Camera* thereby exposing filiations between films of such different aesthetics and politics.

The camera is presented as a material element that is more than a simple prop in *The Man with a Movie Camera*. It defines the central human character in Vertov's film as a *cameraman*, and this character's function of "brain" and motor for the movie camera's movement through space and time is an expression of the fusion of the mechanical and organic into a new bio-mechanical kinomatic intelligence whose character, behavior, and "adventures" are documented in Vertov's film. By the end of the film, the movie camera has been liberated, in theory (on screen), from its dependence on a human host, and it celebrates its autonomy in a seminal animation sequence that is the film's pivotal introductory reincorporation scene, as it (dis)plays "itself" in front of its on- and offscreen audiences. By this means, it also lays claim to its new status and presence as both actor and principal character in the film's concluding rite of reincorporation sequence. However, its autonomous existence—its language (focus, point of view,

etc.)—had already been introduced in the film's rite of separation and extensively explored in its liminal phase. The animated sequence points, instead, to the conditions of its autonomy which are rooted in the camera's integrated *tripod-based* humanoid posthuman identity. As the sequence reveals, an operational camera is not an independent entity. It has legs in the shape of tripod legs, it has a neck (tripod head) and atrophied arms in the form of tripod head crank handles. When the movie camera exits its case and interlocks with the tripod to demonstrate its capacity for omnidirectional vision, then moves off stage, and one assumes into the real world, its mobility is based on its "legs," just as its 360° horizontal/vertical flexibility in regard to its *sphere* of vision is based on its tripod head's construction, gears, and crank handle movements. It is on the basis of this mechanical dexterity that Vertov's animation serves as an appropriate prototype for Snow's remote controlled camera activating machine. It not only has "an equal role in the film to what is being photographed," it also actively and proudly flaunts its "expressive possibilities" as it displays its omnidirectional capacity to see, before bowing and leaving, to take its place as an active and productive member of society (Figure 1.14).

Snow's proposed camera activating machine lacked the mobility of Vertov's cameraman because it was fixed in the ground and cable linked to a remote control panel and filmmaker, in addition to being powered by a generator (Michael Snow, email to the author, February 12, 2007; Abbeloos interview with the author (10/8/17)). However, this lack of mobility signaled the uniqueness of its earth-bound, machine-based identity. Scenarization and character-based narration were, as a consequence, minimized in favor of the creation of a film whose visual content was programmed, but not in any conventional sense since camera movements were composed of complex, circular, spatial trajectories, and the camera-eye would simply record what it "saw" with an absolute objectivity that was a product of these movements.

While *The Man with a Movie Camera* introduced a new character and oscillated in a brilliantly choreographed fashion between a story told and the presentation and analysis of camera-based vision, *La Région Centrale*'s narrative logic was completely determined by the intricate 360° movements of a movie camera around a fixed point in space; and that point corresponded in theory to the ideal position of a viewer's head. Vertov had also given the camera an equal role in his film, but it was a "collective" of movie cameras, not an individual camera, that explored the possibilities of camera-vision in different locations and physical conditions. (The cameraman's activities were invariably documented by,

at least, a second cameraman.) As I have already noted, there are moments in the film when the images produced by these cameras represent a direct *reflexive* exploration of the possibilities of machine vision. They are strategically located throughout the film, and they are subordinated to the film's overall thematic dictates and their sociopolitical objectives. But this reflexivity was, in the cases where the cameraman is seen pursing his themes, only made possible through a second-hand documentation.

Snow's films were not governed by the same objectives, and the experience they proposed was more directly linked pictorial/material issues in the history of art and experimental film; or landscape in relation to the camera's "expressive possibilities" in the case of *La Région Centrale*. The issues that interested Snow included the material/nonmaterial qualities of the image, the frame and its role in defining the boundary between three- and two-dimensional worlds as well as their transformative impact on one's reading (experience) of those qualities. Also included were the role/function of camera movement in an ongoing redefinition of image quality, and physical, perceptual, and conceptual boundaries as measured against the limits of the picture frame. Snow's films were, of course, also produced in a specific 1960s/1970s cultural environment that was defined by Cold War politics, the Vietnam War, antagonistic race relations, the utopian projects of extraterrestrial space travel, and a powerful counterculture that encouraged independence of thought and experimentation in all domains of life, especially in North America and Europe. It was in this climate of generational conflict and of a radical individualism coupled to utopian collective ideals that Snow would claim that his approach was based on "setting the idea in motion," but in such a way as to highlight the fact that "The idea [the remote controlled, mechanized movement of the film frame against a landscape background] is one thing, the result [the pictorial-perceptual experience of this movement as recorded on strips of film and projected in a movie theater] is another" (Snow 1971: 47).

Snow's interest in camera motion was consolidated when he "made diagrams and wrote plans for sets of possible camera movements" as well as making *Standard Time* (1967), which he had described as an 8-minute "investigation of the effects of a particular set of repeated camera movements" (MSF-TLA, 10–4, Landscape (Earth), typescript, April 1969, p. 1). Snow then worked on a longer 50-minute film ←——→ (Back and Forth), that was eventually shot in 1968 and completed in March 1969 "using a repeated scanning back and forth pan and a repeated up and down pan as the only camera movement." Snow's description

of these movements and their visual effects anticipate those of *La Région Centrale*. "It is almost impossible to describe the effect of this film," he noted.

> Visual rhythms (in film) can have as infinitely varied qualities as rhythms in music. The camera pans continually at various tempi starting at a medium speed then gradually going slower and slower then gradually rising in speed to very very fast. It is set in a classroom and the activity therein was scripted by myself. (Landscape (Earth), typescript, April 1969, p. 1)

By April 1969, when Snow wrote the proposal for his new film, the camera activating machine was clearly prefigured in Snow's earlier investigations of camera movement and its perceptual effects in relation to the film/picture frame.

3

Toward a Cosmic Rite of Passage: External and Internal Locations and a Play of Authorship

La Région Centrale did not explore daily urban life or a city's transportation and communication infrastructure. Nor was it committed to systemic sociopolitical analysis like *The Man with a Movie Camera*. It was, however, engaged with a landscape tradition in the visual arts. Snow stated in 1969: "I want to make a gigantic landscape film equal in terms of film to the great landscape painting of Cezanne, Poussin, Corot, Monet, Matisse and in Canada, the Group of Seven" (TLA, 10–4, "La Région Centrale Original Outline, Application, etc." 1969–70, Landscape (Earth), typescript, April 1969, p. 2). This sentence exposes the scope of Snow's and *La Région Centrale*'s art historical ambitions; while the list of artists he refers to acknowledges a traditional set of art historical references which seems to set him apart from the radical art of the late 1960s. However, in spite of these references, *La Région Centrale* also dialogued with the emerging land art movement of the late 1960s, because of the way that it ambiguously addressed the question of what constitutes a transcendent spectator-centered landscape experience. As de Duve has noted (1995: 34), "Snow's earthwork (for it is after all an earthwork of cosmological scope) has succeeded in producing a here, strongly objectified but negatively, neither actual nor virtual, firmly anchored to the earth but in reference neither to the observer's body—there is none—nor to a there defined as a goal or a faraway horizon."

External locations

Land art emerged in the late 1960s and developed throughout the 1970s. Artists who contributed to its development included Alice Aycock, Michael Heizer,

Nancy Holt, Mary Miss, Robert Morris, Denis Oppenheim and Robert Smithson in the United States; N. E. Thing Co. and Bill Vazan in Canada, and Hamish Fulton and Richard Long in Britain. Snow's contribution to this movement was radical, if oblique, because of the way that he replaced the human body's place and interaction with the landscape with that of a virtual sphere—with its multiple cosmic connotations—constructed by his remote controlled camera. This novel form of interaction, which was also a characteristic of expanded cinema and its immersive experiments, was dictated solely by a set of choreographed camera movements, as opposed to being defined by a landscape/human body interaction, even though the camera mechanism's operational dimensions (defined by the camera's 360º movement through space) were tailored to the human body's dimensions. In contrast to Fulton, Long, or Oppenheim who created photographic documents of their activities, Snow provided the spectator with a firsthand cinematic experience based on a machine-based landscape survey. His approach was therefore similar to Jan Dibbets' as registered in the Dutchman's composite landscape-based perspective corrections of the early 1970s. (Dibbets' corrections could also only exist in the form in which they were experienced since they were geometric transformations as opposed to photographic documents.) Although Snow's camera-machine system was strategically implanted in the landscape, it was placed there in order to produce raw visual data that could later be organized into a film product. Snow's engagement with the landscape was also conceived in relation to an existing institutional economy (cinema) as opposed to the work of many of the more radical land artists (Smithson, Morris) who were interested in transposing the spectator into post-institutional environments (Figure 3.1).

La Région Centrale's references were traditional when measured against Morris' *Observatory* or Smithson's *Spiral Jetty*, and its subject matter was, as Snow acknowledged, resolutely Canadian. The film's Northern Quebec location provides a measure of the distance that existed between Snow's canonical international art historical references and his "local" art historical roots in the pictorial tradition of the Group of Seven. However, these references positioned Snow's film project in an ambiguous space between Europe and North America, the old and the new, painting and cinematography. Whether this position was actively cultivated in the interests of bridging art worlds or not, its immediate effects were felt in New York as well as Canada.[1]

Although Snow's references were traditional, his choice of location was not. Snow's description of the physical and pictorial parameters of the kind of natural environment he was looking for is worth presenting in full because of the light

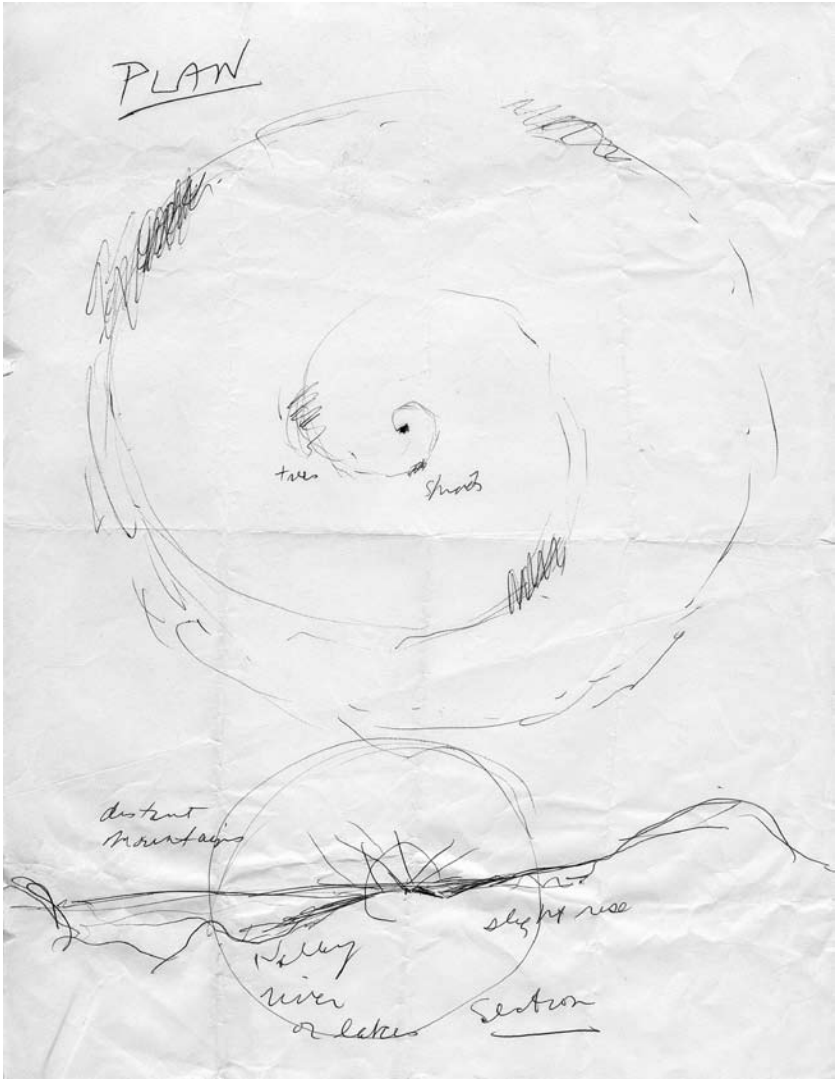

Figure 3.1 *La Région Central* Plan. Spiral top/horizon views. Compare top view to Smithson's *Spiral Jetty* (1970) and to *De La*'s installation plan and announcement, designed by Snow, for its first presentation at the National Gallery of Canada (see Figures 6.2 and 6.4). The spiral form invites allusions to Hitchcock's *Vertigo* (1958), in particular the film's spectacular poster designs by Saul Bass.

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

that it sheds on *La Région Centrale*'s relationship with an international land art movement in the late 1960s/early 1970s.

> The location, the subject will be in Northern Quebec or Ontario. I envision a panoramic area centred on a field, bushes, trees, in the middle distance a stream[,] river or lake, rocks, mountains and hills in the far distance. Perhaps the only man-made element shown will be a road. The entire film will be shot from a fixed central point and the entire surrounding area will be the subject. It will be "examined" and revealed.
>
> There will be a cast of 6 to 8 people. These people are the people who are making the film. The beginning of the film will reveal them and equipment working on the film. At this point various kinds of film and camping equipment and a yruck [sic.] or station wagon will be the only man-made objects visible. The spirit of this group will be like an early surveying party or explorers. Underlying the whole endeavor will be the feeling of applying remote moon exploration techniques to the earth. The relationships of the people to the camera and to the landscape will cover a scale of involvement [sic.] from being peripheral, dwarfed by the land to being intimate with them, personal qualities and relationships will be brought out. Arrangements (shown on the screen) will be made in setting up the shots and the machinery until eventually the camera operates on its own, mechanically. The camera will be started like a clock and when this is accomplished the people will leave. This period will be enacted during very slow camera circular panning motion for maximum "legibility." (MSF-TLA, 10–4, Landscape (Earth), typescript, 2–3)

Later Snow declared that "the scene and action will be shot at different times of day and in different weather although all in the spring or summer" (Landscape (Earth), typescript, 3). The film was eventually shot in late September/early October, 1970, over a five-day period under differing weather conditions marked by the presence and absence of snow.

The references to Northern Quebec or Ontario and a surveying party are significant given the fact that Snow's mother was born in Chicoutimi, Quebec, and his father was a member of surveying parties who had mapped Northern Ontario. Snow also mentioned that he was in possession of his father's notebooks and photographs and that they had "always had a fascination" for him (Landscape (Earth), typescript, 5). Finally, Snow's reference to moon exploration linked the local with the international, and, beyond earth, to the cosmic; the personal with the collective; and Canada with the United States in ways that mirrored his artistic career in the late-1960s/early 1970s. As a consequence, art history was

not the only influence on *La Région Centrale*, biographical influences and the recent history of space travel were also at play in Snow's choice of a site for his film (Figure 3.2).

The film project's implicit historical reflexivity was expressed through its references to remote territories, surveying parties, exploration and, in another scale of discovery, lunar exploration, a major subject of media attention in 1969 because of the series of preparatory unmanned and manned Apollo lunar missions that began in 1967 and that culminated in Apollo 11's launch on July 16, 1969, which would herald the Neil Armstrong/Edwin Aldrin moon walks of July 20. Gene Youngblood acknowledged the momentous significance of these events when he pointed out in his 1970 book, *Expanded Cinema*, that "In

Figure 3.2 Edward H. White II during the first American spacewalk, or EVA (extra-vehicular activity), June 3, 1965. NASA Photograph S65–30433. A cyborg non-site.

addition to a radical reassessment of inner space, the new age is characterized by the wholesale obsolescence of man's historical view of outer space."

> Lunar observatories and satellite telescopes, free from the blinders of earth's air-ocean, will effect a quantum leap in human knowledge comparable to that which the microscope provided at the end of the nineteenth century. (Youngblood 1970: 137–8)

The absence of visible references to systemically cultivated human activity was one of *La Région Centrale*'s hallmarks. In contrast to Vertov's politicized ethnographically oriented, composite, comparative survey of an urban environment, Snow was engaged in an entirely different documentary quest, to produce an "absolute record of a piece of wilderness," and his model for this environment was unreservedly contemporary. In precipitate celebration of the marriage of technology and landscape, Snow proposed, according to an implicit feedback logic, that "Eventually the effect of the mechanized movement will be what I imagine the first rigorous filming of the moon surface"—only to qualify (and invert) his utopian space age vision with the dystopic statement "*But* this will feel like a record of the last wilderness on earth, a film to be taken into outer space as a souvenir of what nature once was" (Landscape (Earth), typescript, 3–4, emphasis in the original).

> I want to convey a feeling of absolute aloneness, a kind of Goodbye to Earth which I believe we are living through. In complete opposition to what most films convey this film will not present only human drama but mechanical and natural drama as well. It will preserve what will increasingly become an extreme rarity: wilderness. Perhaps loneness will also become a rarity. At any rate the film will create a very special state of mind and while I believe that it will have no precedent I also believe it will be possible for it to have a large audience. (Landscape (Earth), typescript, 4)[2]

As these references suggest, *La Région Centrale* was strategically positioned between a postulated inner space of consciousness ("a very special state of mind"), the earth's globular (spherical) surface (upon which the camera activating machine was placed), an atmospheric envelope (which defined the space of the camera's three-dimensional operation), and a deep interplanetary space whose threshold was most easily associated with the moon, a familiar object that functioned as the earth's most immediate and accessible "final visual frontier" in the late 1960s/early 1970s popular imagination. Moreover, it was the moon that would serve as the film's ultimate antigravitational model and

its most ambiguous, abstract, "non-site" counterreference to the film's Northern Quebec subject matter in *La Région Centrale*'s central liminal nighttime scene.

Snow's ecological, vaguely political focus on a drama composed of human, machine, and natural elements and his use of metaphors of wilderness and loneliness is in stark opposition to the kind of urban landscape, structured in terms of transportation and communications systems, and patrolled by cameramen, that was the herald of a new scopic regime in Vertov's case. Moreover, his metaphors of wilderness and loneliness do not resonate with the visions of personal drama that Vertov maps in *The Man with a Movie Camera*'s vignettes of birth, marriage, divorce, accident, and death recorded by his team of cameramen; and the gap between the two uses of machine vision is clearly registered in Snow's desire to "create a very special state of mind" that "will have no precedent," (although an equally special state of mind was, in a different political and teleological register, the primary objective of Vertov's film). The visual/perceptual embrace of Snow's machinistically framed cosmic landscape also echoes Vertov's cosmically informed (day in the life) urban embrace, but in an inverted manner (through a calculated return to earth's "barren" natural—lunar-like—origins). Instead of looking down on the human activities taking place in a cosmopolitan environment, as Vertov's giant tripod-based movie camera system periodically did in *The Man with a Movie Camera*, Snow's camera activating machine would sweep and objectively survey the immediate ground in which it was planted, the landscape and sky in complex geometric patterns and variable speeds until the images produced began to detach themselves from their referent and claim their pictorial autonomy from the earth in the name of a cosmic independence. External space was not replaced by internal space, it mutated in its terms.

Snow's 1969 project outline contains other interesting information concerning his vision of the film, such as his ambitions for the camera's role in authoring the film. The outline also gives the reader a good sense of the film's formal/narrative dynamic and a basic structure that was adopted at this early planning stage: an introduction, or rite of separation, involving the film crew and equipment (edited out of the final version) and a main or liminal section—Snow's middle hour "plateau" devoted to the objective recording of a landscape by way of a complex machine-based vocabulary of camera movements whose objective was to create "a very special state of mind." That state was consolidated in the film's final phase when one looked "back from the *other side of the end*" (MSF-TLA, 9–6, "Notes from the Filmmaker," my emphases). Finally, as this early

document suggests, the film would represent a watershed in Snow's exploration of a *mechanically articulated* language of the *camera*. It reveals Snow's vision and understanding of the camera/tripod complex's role in the creation of specific kinds of visual experience (and states of mind) within the limitations of a basic 400 foot (approximately 11min., 6 sec.) roll of film.

This approach was very different from Vertov's method of using/exploring the camera's mechanical possibilities. While Snow was interested in exploring the camera's spatial-formal possibilities as defined by a fixed position in space in such films as ←——→ (*Back and Forth*), *Wavelength*, and *La Région Centrale* (subject as always to modulation through improvisation), Vertov focused on the relationship between the camera's movement through space and its ability to register specific types of political, social, and ethnographic information, and the possibilities of different perceptual and intellectual experiences that could be transmitted to an audience depending on how this information was relayed between isolated film frames and linked sequences of film frames. Snow's film was conceived, even in its initial planning stage, in relation to uninterrupted camera movement. As the filmmaker claimed at the time, "There will be no cutting in the film after some seemingly 'trial and error' shots by and showing the group (about ten minutes)." This statement also acknowledged a redistribution of creative authority from the filmmaker to the filmmaker's program and through this "scenario" to the camera activating machine and its designer (Pierre Abbeloos). It acknowledged the redundancy of the editor and its replacement by a predetermined script for camera movement. In practice, however, Snow's strategy was more complex and flexible. He had to script the camera's movement and to find a way to relay the information between script and machine. In the end, a human agent (Snow) remotely operated the camera because the control tapes could not be produced in time, and he engaged in on-site camera movement improvisation. Moreover, although Snow later noted that he "only looked in the camera once," and that "The film was made by the planning and by the machinery itself," someone did look into the camera viewfinder at the beginning of each roll and the raw footage was reorganized in order to produce a final product (Snow 1971: 47).[3] Nevertheless, Snow ideally wanted the film to be continuous in the sense of making the film "a temporal circle" that would begin around 12 o'clock noon and end the next day at around the same time (it actually ended an hour earlier at around 11 a.m.), as well as in the sense of editing "the tail of a reel with the head of the succeeding reel" (email to the author, July 27, 2010). Thus changing light conditions would ideally be presented in a continuous manner.

Moreover, the film's basic 400 foot sectional logic suggested an automatic end-to-end, materially based model for the film. But the model was fractured by editing and the periodic insertion of screen-sized Xs.

La Région Centrale's final form was broken up by a series of frame- and therefore screen-sized Xs that served as reflexive "inserts" within an ideal, articulated 11 min. 6 sec. 400 foot production logic. These graphic markers operate at a different organizational level when compared to, for example, Vertov's montage intervals in *The Man with a Movie Camera*, although they seem to have a similar reflexive function to the film's inclusion of numerals to perhaps create chapter-like partitions.[4] Montage intervals operate, in contrast, below the level of an individual shot. Differences (between each film frame and thematic cells) exist between and within shots as metronomic markers of a single frame's perpetual place within the whole. In contrast, since *La Région Centrale*'s landscape subject matter is in continuous motion, the Xs were designed to operate like a "'stop/don't-move' 'sign'" to fix the frame. Snow noted, in retrospect, that "the spectator can sometimes experience that reciprocal motion effect of one train moving beside a stationary one: briefly it seems that one in the unmoving car is moving. This was a gift of the X that I hadn't foreseen." The Xs also divided "the film into chapters, but not consistently" since during the editing stage Snow had gotten "very involved in the duration (and placement . . .)" of them. These graphic punctuations introduced a degree of flexibility and human agency into the film's final form, which complemented the filmmaker's on-site improvisations—unscripted activities which were associated with "the possibilities of learning while shooting" (Snow, email to the author, July 27, 2010). Snow's reference to "learning while shooting" reveals the fundamental role that improvisation had in *La Région Centrale*'s production, notwithstanding its systems-based ethos and the complex, systemic spatiotemporal experience that was projected into a viewer's mind—a strategy that was also used, for example, in the production of *Wavelength*. Finally, flexibility was also introduced into the system because of the reconstructed nature of the film's electronic sound track.[5]

However, programming and automation were one thing, the random generation of instructions by a machine for a machine was something completely different. If pure automation was not Snow's final objective because of his desire to exercise a subtle control over "pattern (movement and focus) and speeds," then this possibility was nevertheless built into his proposal as the ultimate solution to the camera/landscape relationship he was interested in exploring (MSF-TLA, 10–4, Landscape (Earth), 4).[6]

In contrast to Snow's approach to camera movement, the activities of Vertov's cameramen were overtly governed by the implicit and theoretically defined, if utopian, collective authority of Kino-Eye's hierarchic observational/manufacturing system in relation to which they would ideally function. Their final presence in the film was determined by a system of shot classification and montage logic managed by the assisting editor and director (in his penultimate position of "author-supervisor"). Snow's authorial relationship to *La Région Centrale* was, in contrast, embodied in the script that he produced for the film's camera movements, his hand-held mediation in the transmission of instructions that bear witness to the presence of random human agency, and his governing role in editing the film.

Although the machine logic of automation did not govern film production in the way that was planned, its failure paved the way for the question of human agency to be "resurrected." Resulting authorial ambiguities were inadvertently acknowledged in the transference of subjectivities registered in such phrases as "the possibilities of learning while shooting" and "If you become completely involved in the reality of these circular movements its *you* who is spinning surrounded by everything, or, conversely, you are a stationary centre and it's all revolving around you" (Snow 1971: 46, emphasis in the original). Given such contradictory viewpoints, it almost doesn't make any sense to ask a question like "*Where* is the *actual* author?" Snow's film suggests that, in the end, it is the film strip itself which assumes its own authorship, thereby acknowledging the fact that an external location has mutated into an internal one. But even in this scenario, the question of authorship was complicated because it was also defined in terms of an absence. It's worth reiterating again in this context Snow's own analysis of *La Région Centrale*'s absent center:

> But on the screen it's the centre which is never seen, which is mysterious.. . . You see the camera moves around an invisible point completely in 360 degrees, not only horizontally but in *every* direction and on every plane of a sphere. Not only does it move in predirected orbits and spirals but it itself also turns, rolls and spins. So that there are circles within circles and cycles within cycles. Eventually there's no gravity. The film is a cosmic strip. (Snow 1971: 46–7, emphasis in the original)[7]

Snow's "cosmic strip," did not correspond to the location (fictional or real) in which the film's raw data was shot as one might experience in a conventional film (through its illusionistic magic and suggestive powers of representation)

or through the trickledown effects of cinematic realism in the case of *The Man with a Movie Camera*'s multiple source montage of a city and the human and industrial activities that it harbored.

As Snow pointed out, there was a core absence that represented the absent "presence" of the camera/camera activating machine: an authorial "centre which is never seen." The absence was, however, doubled insofar as an author was also *represented* in that absence: Not only by the camera activating machine (body) and camera (eye), as one would expect, and the hand-held console and the filmmaker somewhere near by. *It was also represented by the film itself*: a "cosmic strip" fed through the projection machine that was designed to bring it to "life." The film was the author of its own experience not because it was a fiction rooted in the camera's viewpoint (as in the case of a conventional narrative film), but because *the camera activating machine, and therefore the film's process of production, was conceived to be automatic and thus it was conceived (in theory) to exist beyond human agency and even beyond the earth's gravitational influence.* Thus, once activated, the film's implicit director was the camera activating machine *itself.* This was, of course, a "utopian" scenario.

This approach to filmmaking and its product was quite different from the one proposed in *The Man with a Movie Camera,* or even the one underwriting, or the one that was analyzed in Farocki's *Eye/Machine* trilogy and *Counter-Music* (which I will be discussing in Chapter 8) where the objective of each of these directors was not to explore and ultimately liberate the inherent material/perceptual parameters of camera vision. Their films functioned as metadiscourses on their own technical conditions and possibilities of sociocultural and political existence. Vertov pointed to this theoretical and practical possibility in his writings on an expanded sensory matrix for a critical (Soviet) consciousness. Snow, in contrast, produced a prototype that operated in an alternative way.

A transcendent/perceptual approach versus a meta-ethnographic one: Both films exhibited distinct, overtly reflexive stances to their medium, its limits and its capacity to vehiculate content. Take, for example, Snow's April 1969 discussion of the camera movement to focus relationships in his proposed film.

> The relationships of the camera movement to focus can be complicated to describe but the film will open with a very slow circular pan (horizontal), lens set at infinity over a period about 3 quarters of an hour (during the crew action) this will gradually accelerate until it is going so fast it will be completely abstract colour, during this passage the movement will gradually (still a circular pan) not move in a horizontal line but become a diagonal zig-zag movement and become

> focused closer and closer. This will go slower and slower but not quite as slow as the first movement until it and the scene are more and more "readable" this will then re-speed up in shorter time gradually changing to a vertical circular pan with an attendant change of focus. (MSF-TLA, 10–4, Landscape (Earth), 3)

Clearly, the medium, as McLuhan famously proclaimed, was the message, even though Snow's landscape subject matter provided an initial content and broad cultural/art historical *raison d'être*. Snow's initial claim to have the "entire film planned" was therefore not exaggerated, at least when considered from the point of view of its basic mechanical logic (as expressed in the *idea* of the camera activating machine and its possibilities vis-à-vis automatic 360° camera motion). The project's strategic priorities were clearly presented: camera movement, focus, and speed, and the fact that they would lead to a film that oscillated between realism and abstraction.[8] This relationship had already been explored in ←——→ (*Back and Forth*), but in that case Snow was still treating camera motion within a narrative/fictional frame of reference, even if camera movement and narrative content were conceived independently of each other. In this new project, the narrative and documentary content was to be gradually evacuated as a three-dimensional landscape space was eventually flattened, through various strategies (camera movement, sky and nighttime shots, etc.), into an abstract two-dimensional space whose geometric properties resonated with those of a three-dimensional spherical space, thus setting the stage for further plays between realism and abstraction. But it was still initially conceived in relation to the kinds of narrative fictions deployed in Snow's previous films, as the film crew/equipment scenario suggests. If the film crew/equipment scenario pointed to an exterior location, its elimination in *La Région Centrale*'s final cut represented the triumph of inner space over an external location. Insofar as the film was concerned, it was not even a question of physical space: it was a question of representational versus transcendent cosmic locations: the one on screen, the other accessed through the viewer's mind; their interface composed of eyelid/frames.

Snow's film project was based, at this initial stage in its development, on two categories of camera movement: random and formal. The random movements were, oddly enough, independent of any precisely fixed location and machine logic. They included: "camera swung like a pendulum on a line and allowed to rotate freely while shooting, camera dropped on a rubber or spring line allowed to bounce while shooting" (MSF-TLA, 10–4, Landscape (Earth), 3).

This category of movement echoed the relatively free or autonomous use of the camera by Snow's contemporaries, such as Vito Acconci in *Fall* (1969), while it anticipated the work of others like John Hilliard who explored similar camera movements and pictorial effects in such works as *Describing a Trajectory—Camera as a Projectile* (1971). Suggested formal movements included "falling and rising, pan, diagonals, moving in a repeated rectangular path, combinations such as tilting up and down while zooming in and out" (MSF-TLA, 10–4, Landscape (Earth), 3). At this stage there was a clear distinction in the project's development between movements that were independent of the traditional articulation of camera and tripod and movements that were a function of this articulation. The former were clearly incompatible with the kinds of mechanized movements that Snow had stated as being the ones that would dominate in his film after the initial period of equipment setup.

Snow's inventory of movements also echoed those explored by Vertov in *The Man with a Movie Camera*, which were geared to producing optical transformations between "documentary" information on, for example, railway carriages functioning as symbols of transportation/communication and abstract forms and blurs that ended up highlighting the material presence of film and screen surfaces. However, the adoption of a fixed position as pivot for spherical camera movements was beyond the *The Man with a Movie Camera's* shooting parameters. But, again, Snow's inventory did resonate in different ways with the work of his contemporary, Dan Graham, in such works as *Two Correlated Rotations* (1969), *Roll* (1970), *Body Press* (1970–2), or *Helix/Spiral* (1973).

Whereas the camera was body bound in *The Man with a Movie Camera*, in Snow's film it operated in a pseudo-autonomous way (the filmmaker's body was "tied" to the camera activating machine by way of a cable that acted as an "umbilical cord" to transmit Snow's scripted or improvised instructions directly to the machine). However, it was still resolutely earth bound, as the initial title of *Landscape (Earth)* suggests. These distinctions between camera-body relationships in the case of the two filmmakers were historical and cultural. One must also not forget that the on-site assembly of Snow's "camera machine system" was managed by the filmmaker and his crew, and that on-site activities, from the placement of the camera activating machine to Snow's approach to the landscape as expressed through the final raw footage, etc., reflected different sociocultural and aesthetic objectives from those implicated in Vertov's Kino-Eye organization and the movements and actions of the cameramen in *The Man with a Movie Camera*. Snow provided a very clear description of the camera

movements' machine-based cultural roots when he stated in his initial project outline that "The camera movements will be machine controlled so I will hire a technician to assemble, construct, design the various necessary machines so that the pattern (movement and focus) and speeds can be subtly controlled.. . . The technician will assist in the production and possibly appear in the film" (MSF-TLA, 10–4, Landscape (Earth), 4).

Location also took on a different meaning in this case. It was obviously geographically defined, but it was also mechanically and electronically defined—the two interfacing in sensory synergy, the product of a tight feedback loop between the landscape, Snow's program, his improvisations, and the camera activating machine's movements as registered in exposed rolls of film.

Snow initially felt that a technician's presence could be treated in terms of documentary information (he wanted to use two or three actors "to do the directed acting (acting firstly as members of the crew)"). And in order to achieve what he wanted in terms of dialogue, Snow proposed that Richard Foreman could assist him (MSF-TLA, 10–4, Landscape (Earth), 4). However, if the project's initial frame of reference shared common fictional characteristics with his earlier films, the frame was dropped from the final cut, even though the issue of fiction's relationship to an "objective" documentary recording of a landscape lived on in Snow's approach to the film's sound track which articulated the concept of location in another way. Initially Snow noted that the sound would be synchronized "but recorded with the microphone travelling in the same pattern as the camera so that the qualities of the sound will equal that of the image, diminishing in volume etc. when further away from the source." In this case, acoustic location mimicked the geometry of camera movement in a coherent manner. Snow went on to mention, however, that "The dialogue and natural sound recorded will be augmented and enhanced in studio re-recording later" and that "Some of the sound of the machinery used to move the camera will be used or simulated" (MSF-TLA, 10–4, Landscape (Earth), 5). This "dualistic" approach was the final one to be adopted because of the technical problems of using an electronic soundtrack to control camera movements within the production schedule. Snow preserved the hybrid documentary/fiction model that he had previously used in films like *Wavelength* or ←——→ (*Back and Forth*) with their ambiguous relationships to experimental fiction and structuralist/materialist filmmaking strategies. Beyond the basic claim about its art historical landscape ambitions, and his ongoing flirtations with experimental fiction, Snow's desire to explore the automated, programmed-based spatial possibilities

of the camera ensured that the resulting film marked an important mutation of the type of developmental history that Vertov mapped out in his theory of a machine-based sociopolitical collectivization of the human sensorium, if not completely at the level of image/sound interaction, then certainly in terms of the material foundations of the camera/image relationship.

The materialized, pictorialized synthesis of a single Northern Quebec location according to a scripted and improvised "multitracked" 360° spatial trajectory was the principal ingredient of the cosmic experience that *La Région Centrale* proposed for its viewers. Cosmic synthesis equaled, in its turn, a multitracked "embodiment" of that external location within a single linear track of film. But location was not just site specific in these two senses. It was also process and, as we shall see, ritually based. Locational embodiment and a linear processual trajectory were integral to *La Région Centrale*'s rite of passage function. However, before addressing this function and its spatial characteristics in detail, I would like to explore the film's broader cultural context in order to clarify some of the film's potential social functions.

Establishing a cultural context: Modeling film space as cosmic space

Snow claimed that *La Région Centrale* would induce a type of *cosmic* experience as such phrases as "Nirvanic zero," "cosmic strip," or "cosmic planetary" suggest (Snow 1971: 47). What better way would there be to achieve this experience, than to root it in a desolate environment that had no claim to an individual historical identity other than the one imagined in Snow's proposal? Indeed, *La Région Centrale*'s location was devoid of significant environmental markers, a condition of anonymity that was reinforced by the calculated on-screen absence of any clear markers of human or machine-based activity other than the fleeting appearances of the camera activating machine's ambiguous shadow: "You don't see the machine, but a couple of times you see its beautiful, strange shadow, a passing hint at the source of the phenomenon you're involved with" (Snow 1971: 47). In fact, the camera activating machine's shadow was, as in the case of Vertov's eye/camera lens symbol, a constant, if periodic presence throughout *La Région Centrale*. Its constantly changing form within the film, a product of the sun's angle and camera position, created a distant shadowy reference to another, perhaps science fictional world, thereby reinforcing the film's comic interplanetary allusions.

If Snow's film was to envelope the spectator in a synthetic cosmic embrace, then this was the kind of immersive visual/perceptual *experience* that was diametrically opposed to Vertov's project and vision of a collective sensorium. As Snow noted, "La Region isn't only a documentary photographing of a particular place at various times of the day but is equally and more importantly a source of sensations, an ordering, an arranging of eye movements and of inner ear movements" (Snow 1971: 47). While such language does conjure up vague analogies with Vertov's visual methods (ordering and arranging a *structurally-compositionally* defined visually itinerary for the eye and ear), the film experience referred to was very different.

As I have argued in Chapter 1, Vertov proposed that the Kino-Eye mode of organizing observation/ manufacture be extended to link together other technologies of the human senses with the aim of transforming human thought itself. His utopian, yet prophetic statement comes from a lecture delivered in the same year *The Man with the Movie Camera* was released. It is worth reproducing Vertov's statement again, here in the context of Snow's project, to serve as a reminder of the differences that exist between each filmmaker's approach to the filmed document.

> From the montage of visual facts recorded on film (Kino-Eye) we pass to the montage of visual and acoustic facts transmitted by radio (Radio-Eye).
>
> We shall go from there to the simultaneous montage of visual-acoustic-tactile-olfactory facts, etc.
>
> We shall then reach the stage where we will surprise and record *human thoughts*, and, finally, we shall reach to the greatest experiments of direct organization of thoughts (and consequently of actions) of all mankind.
>
> Such are the technical perspectives of Kino-Eye, born of the October Revolution. (Vertov 1967: 101–2, emphases in the original)

This extract presents the principal stages in the development of a systemic panhuman *sociopolitics* of multisensory representation, where "facts" represented *selected* and organized sociocultural and political information (as opposed to raw data recorded on film). In this model, the systematic search for visual information preconditions data in advance of its compilation according to a montage logic that begins at a film's conception. Appropriate "information" guaranteed an image's *factual* identity, its correct use as a building block of film-based knowledge and its *document*ary articulation with similar elements into

a "film-object." In Vertov's words "In fact, the film is only the sum of the facts recorded on film, or, if you like, not merely the sum, but the product, a 'higher mathematics' of facts."

> Each item or each factor is a separate little document. The documents have been joined with one another so that, on the one hand, the film would consist only of those linkages between signifying pieces that coincide with the visual linkages and so that, on the other hand, these linkages would not require intertitles; the final sum of all these linkages represents, therefore, an organic whole. (Vertov, "*The Man with a Movie Camera*" (1928), 1984: 84)

As Kino-Eye's "composite sense-organ"—its collective omnidirectional eye—became increasingly collectivized (a) through a pan-sensory expansion in its hierarchic montage-based socio-technological organization and (b) through its intimate working relationships with the factual representatives of the other senses, its powers would be increasingly recalibrated, disseminated, and strengthened. Progressive, factually governed sensory integration and montage-based dialogue would lead to a new multi-sensory fact-based sovereignty over the social spaces of an evolving Soviet culture and would eventually lead to a "direct organization of thoughts (and consequently of actions) of all mankind."

Snow's "cosmic" model, as outlined in his 1969 outline and presented in *La Région Centrale*, is also collective and communal in conception. It engages with the idea of an expanded filmic consciousness that is the product of the spectator's visual/perceptual experience of the film, and it engages with the ordinary (natural) world in an analytic and systemic manner. As Snow noted, "It [the landscape] will be 'examined' and 'revealed.'" In retrospect, he described his ambitions at the time as wanting ". . . a language of motion compatible with the subjects, the earth, the sun, the moon."

> That is circular movements, turning, spinning, ones. Compatible but superimposed because un-natural, machine made. Something else that's turning.
>
> I wanted a way to move the camera in even circular movements, or spherical ones in any possible direction to make the cancellation of our sense of up and down which is, of course always imposed on everything, a temporary experience of the film. Cameras can be held upside down or you can balance on your head.

Insofar as the camera was not visible, Snow conceived the film to be the product of "A disembodied eye in space."

La Région Centrale's primary, liminal, extraterrestrial "science fiction" dimension was reinforced by a conscious strategy to exclude people and man-made artifacts: "What was man-made would be the film. The earth would be seen by us, that is the spectators, . . . without us in it. The independant earth metaphorically either before us or after us" (MSF-TLA, 48–1, "Recontres Internationales, Paris, 1990; Drafts of lecture on '*La Région Centrale*' and '*De La*,'" (npn—1).

La Région Centrale lacks the Russian Revolution's ideological infrastructure and the theoretical/methodological rigor of Vertov's brand of sociopolitically and aesthetically impregnated montage theory. Snow's film was, in contrast, a canonical cultural product of a different sociopolitical context with its aspirations for radical change and its promotion of a counterculture that would be forged on the basis of each individual's quest for social, political, and cultural liberation. One must not forget, in this connection, Snow's references to rock concerts and lunar exploration, diverging paths for the 1960s mind to escape from the welter of international, national, and urban conflicts and from the underlying boredom associated with the mundane micro-practices of day to day existence as pursued in a television saturated North American environment. Nor can one ignore Snow's dystopic end-of-the-world references to producing "a record of the last wilderness on earth, a film to be taken into outer space as a souvenir of what nature once was," and to "a feeling of absolute loneliness, a kind of Goodbye to Earth which I believe we are living through" that echo the sense of alienation that one could find in many mainstream films of the period (MSF-TLA, 10–4, Landscape (Earth), typescript, April 1969, 3–4).[9] *La Région Centrale* proposed another way *out*: an escape route that could begin *in* each individual mind. It embodied, in other words, a 1960s "cosmic" Zeitgeist, where a state of collective countercultural consciousness could find an appropriate metaphor, as we shall see later in this book, in the weightless suspension of the autonomous astronaut between earth and moon (Figure 3.2).

Gene Youngblood pointed to the film's unique capacity to promote an individual sense of autonomy in an April 9, 1971, letter to Snow when he ironically noted:

> I've always felt that I was the center of the Universe but I had no proof until I saw "La Région Centrale." Now let them laugh. The only problem is that everyone else who saw it at the same time said *they* were the center. (MSF-TLA, 47–4, "Structural Cinema, Vancouver Art Gallery, 1972; re: *La Région Centrale*." Letter from Gene Youngblood to Michel Snow, April 9, 1971)

Youngblood's comments, which were based on his viewing of a "fragment" of Snow's film, highlight its peculiar psycho-perceptual and dys-locational, and *individualized* communal effects: Its ability to "place" the *individual* spectator at the center of a two-dimensional visual event, thereby promoting the mental illusion of a three-dimensional cosmic experience (as opposed to experiencing this illusion on screen). He was also clear about its private dimension, as if the frontality and two-dimensionality of the screen reinforced a condition of personal concentration and isolation, even though each viewer was surrounded by other people who were sharing the same visual experience. While all films create similar experiences, the uniqueness of Snow's film resided in how it managed to psycho-perceptually place the viewer within its *absent* central region (Snow in Koller 1972). One notes, in contrast, Vertov's insistence on the collective and social nature of cinematic experience in the first and last sections of *The Man with a Movie Camera* with their multiple references to the audience presented as individuals coexisting within a collectivity that is the creation of cinema and its viewing architecture.

The particularity of *La Région Centrale*'s perceptual-materialist experience was also noted by other people who saw the film. In September 1972, one viewer, John Shipman, noted after seeing the film:

> In the uniform circular motion there is a constant acceleration directed to the centre. Color at speed, this is the absence, what is seen. Color considered as mass, seeing considered as force, what sees, the mind, considered as the centre. Changing velocity and direction expressing or creating a causing force from the centre. However, a region not a centre, a field, because of changing not constant acceleration. Less a region than if the filmmaking machine were free of so obvious an external field as the earth's gravitational field. Yet the most important thing is the machine fixed to the earth as we are in our chairs. Thought is the tremdous mass/energy that creates the phenomena. On film is the result, the cause fills the empty chairs. The film of this film is seen not means. As it is shown it is seen and the seer is its cause, the seeing its causing, seeing as causing. (MSF-TLA, 47–4, "Structural Cinema, Vancouver Art Gallery, 1972; re: *La Région Centrale*." John Shipman, *La Region Centrale Theink*, September, 1972, 2)

Shipman's playful, punning statement is a clear acknowledgment of the complex sensory and epistemological effects produced by *La Région Centrale*'s particular embodied-(dis-embodied) experience of its enigmatic central region. Outside becomes inside through a process of sensory ingestion. But the inside is perceived as enveloping the viewer in a transcendent cosmic mind space which escapes the earth's gravitational field.

Another viewer concluded a long description of the experience of seeing a preliminary version of the film in May 1971 with the following observation: "Thus, Michael Snow has submerged the audience within a *Central Region*—a unique space which is given a rich identity through the abstract, but creative movement of the camera which reinterprets its environment by creatively harmonizing with its natural colors and rhythms." As Snow remarked in a manuscript note at the end of the description: "You should see the 3-hr. final version (just completed and screen 5/27)—it's a whole different place—" (MSF-TLA, 47–4, "Structural Cinema, Vancouver Art Gallery, 1972; re: *La Région Centrale*." M. Hearn, May 1971, 3).

As in Shipman's case, the film's English subtitle of "Central Region provided the perfect medium to direct the viewer to *La Région Centrale*'s essential core." "... a whole different place—" summed up the ethereal, visceral sensorial presence of the end-product of Snow's project and its machine-based engagement with a distant Northern Quebec environmental site. One environmental experience was translated into another newly imaginable "place"—a singular space with its distinct, "rich [camera based] identity."

The subject of consciousness and mind expansion was very much in the air in the early 1970s (Leary et al. 1965; Youngblood 1970: 135–77) and it is easy to imagine how *La Région Centrale* could become model and reference. Marshall McLuhan had galvanized the imagination of a generation of students, artists, and intellectuals with his astute vulgarizations and brilliant extrapolations of communications and cybernetic theories in such books as *The Mechanical Bride* (1951), *The Gutenberg Galaxy: The Making of Typographic Man* (1962), *Understanding Media: The Extensions of Man* (1964), *The Medium is the Massage: An Inventory of Effects* (1967, coauthored with Quentin Fiore), and *War and Peace in the Global Village* (1968, also designed by Fiore). These books provided the historical frame of reference and poetically inspired intellectual vocabulary to a new generation of artists who had been brought up in a mass media environment whose iconic "representative" was television; and it was this medium of mass communications that highlighted Western society's deep contradictions through its constant juxtaposition of images of an ideal (American) life as mapped out by the constant media-based transmission of advertisements and the unprecedented, candid day-to-day reporting of fighting in Vietman. As the seminal 1956 British Whitechapel Gallery exhibition and catalogue ambiguously proclaimed, as if to inaugurate the tumultuous decade of the 1960s with its most appropriate slogan: "This is Tomorrow."

Faced with the power and contradictions of a mass media-based culture, artists were now in a position to arm themselves with the necessary historical and conceptual tools to allow them to function in a progressive manner as critical *radar operators* vis-à-vis "the psychic and social consequences of technology," the basic motive force behind the spectacular success of contemporary systems of mass communication (McLuhan 1964: ix). *Understanding Media* served, in particular, as a concisely packaged inventory of old and new media whose chapter-based rosters of theory (Part I) and technology (Part II) allowed for either cursory or in-depth consultation. It provided its reader with key theoretical words and phrases such as "hot" (warm) and "cold" (cool) media and "the medium is the message." They not only became the standard bearers of a counterculture and therefore the signs of a common theoretical-critical language (and attitude) vis-à-vis a dominant mass media culture, they were also used as compact tools of analysis and criticism for the development of individual practices. But McLuhan's program was not political in the sense of Vertov's, it was also a product of *its* time. *Understanding Media* was hip and populist in tone and it celebrated a new electronic stage in human evolution; and McLuhan placed artists at the visionary vanguard of this evolutionary process.

McLuhan's impact on the advanced art world of the 1960s was officially recognized through the 1967 publication of an issue of *Aspen Magazine* devoted to his ideas. The issue, no. 4, of this innovative, boxed three-dimensional multimedia magazine was designed by McLuhan's colleague Fiore. The box itself was clothed in a quote from *The Medium is the Massage* and it contained eight items including a poster-sized collage of proof sheets from the McLuhan/Fiore book, another poster entitled "The TV Generation," and six items by Cage and others. The box's McLuhan quote proclaimed:

> All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the massage. Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments.

McLuhan's revised materialist proclamation highlighted the relationship between media environments, social change, and political consequences, making the latter subtly dependent on the former.

Human activity took place within overlapping spaces of technological transition that had defined most of the twentieth century. McLuhan was

speaking to a generation who had never seen a world without television and related electronic media, and his rhetorical arguments, as presented in books like *Understanding Media*, were tailored to educational ends. *The Man with a Movie Camera* proposed a more active political model of engagement with its own media environment—Cinema—and the broad communications/transportation environment/system in which it was located by Vertov, and it was no less educational in its orientation than *Understanding Media*, since it was also actively engaged in transforming a viewer's perceptual environment and consciousness. Snow's visual works were resolutely engaged with the different media environments available in the 1960s (film, photography, slide projection, video and recorded sound). The notable exception was television with its complex technical infrastructure and its overt social and political content.[10]

Social and political questions, in Snow's case, seem to have been sublimated in an idea like McLuhan's "Art as anti-environment" or "counter-environment" (1964: ix). Artworks were geared to *awareness*—"training perception and judgement" (ix). There was a subtle distinction between works that promoted awareness as opposed to engaging in the pursuit of active revolutionary change. Snow's subtle auto-referential films were beautiful and refined examples of a late 1960s solution to the question of how awareness could become an active coefficient of "perception and judgment."[11] *The Man with a Movie Camera* was also concerned with "training perception and judgment," but its objectives were tailored to revolutionary political change (hence its openly acknowledged propaganda functions and thinly veiled focus on behavior modification). While the politics of representation pursued by many North American and European avant-garde artists and filmmakers of the late 1960s and early 1970s was often defined in terms of revolutionary change (see, for example, the films of the short-lived Dziga Vertov Group (1968–72)), their work was also often filtered through a free-thinking desire for perceptual and textual awareness. Practices were colored by alternative lifestyle choices linked to the counterculture, and counter-institutional stances were often processed through practical explorations of notions of expanded consciousness.[12] With the failure of the 1968 student movements, revolutionary change took on a distinctly personal turn.

McLuhan's definition of the function of the artist in a media saturated society casts an interesting light on *La Région Centrale* and the camera-machine system's functions of expanding consciousness. He argued, for example:

> The effects of technology do not occur at the level of opinions or concepts, but alter sense ratios or patterns of perception steadily and without any resistance.

> The serious artist is the only person able to encounter technology with impunity, just because he is an expert aware of the changes in sense perception. (McLuhan 1964: 33)[13]

How could this artistic function be transformed into a *practice*? McLuhan's answer was simple and above all contemporary in its strategic form. Echoing the ludic, countercultural functions of happenings and the environmental art of the late 1950s/early 1960s he proposed: "As our proliferating technologies have created a whole series of new environments, men have become aware of the arts as 'anti-environments' or 'counter-environments' that provide us with the means of perceiving the environment itself."

> Today technologies and their consequent environments succeed each other so rapidly that one environment makes us aware of the next. Technologies begin to perform the function of art in making us aware of the psychic and social consequences of technology.

McLuhan went on to claim that "Art as anti-environment becomes more than ever a means of *training perception and judgment*. Art offered as a consumer commodity rather than as a means of training perception is as ludicrous and snobbish as always" (McLuhan 1964: xi–x, my emphases).

Youngblood advanced a similar educational role for advanced artistic practices in *Expanded Cinema*, when he argued that "The art and technology of expanded cinema will provide a framework within which contemporary man, who does not trust his own senses, may learn to study his values empirically and thus arrive at a better understanding of himself." He insisted, moreover, that "The only understanding mind is the creative mind," and he associated this progressive form of creativity with a new emerging cultural consciousness (Youngblood 1970: 116). P. Adams Sitney went further in this direction when he claimed that *Wavelength*, ←——→, and *La Région Centrale* ". . . propose modes of camera movement as models of cognition" (Sitney 1979: 415).

This *reflexive realism*—"of training perception and judgment," as defined in relation to "the psychic and social consequences of technology"—, and the idea that a film can serve as a model of cognition, operate in many progressive films and artworks of the period, from Snow's earlier films to those of Godard with their uncompromising didactic allusions and perverse pedagogic functions. But Snow explored a new set of possibilities in relation to this type of realism in *La Région Centrale*. By the late 1960s, Snow was an ideal type of McLuhanesque artist, simultaneously "attuned," radically "didactic" (but not dogmatic or

pedantic) and uncompromisingly experimental. His unique achievement was corroborated, as we have seen, by early viewers of *La Région Centrale* who sensed through their experience of Snow's film the forging of a new reflexive relationship to media, consciousness, and reality.

McLuhan presented another interesting argument in *Understanding Media* concerning the cybernetic role of technology in creating a situation where there was a closed feedback-based transference of primal consciousness between the human organism and media.

> To behold, use or perceive any extension of ourselves in technological form is necessarily to embrace it. To listen to radio or to read the printed page is to accept these extensions of ourselves into our personal system and to undergo the "closure" or displacement of perception that follows automatically. It is this continuous embrace of our own technology in daily use that puts us in the Narcissus role of subliminal awareness and numbness in relation to these images of ourselves. By continuously embracing technologies, we relate ourselves to them as servomechanisms. (1964: 55)[14]

There is an ominous, post-Vertovian ring to this description of an insidious collectivization of individual human consciousnesses and a passive colonization and transformation of the citizen into a servomechanism within an ubiquitous systems control culture. If Vertov placed the accent of his process of sensory collectivization on progressive politics, social action, and "facts," McLuhan highlighted the subliminal operations, alienation, and numbness of an emerging auto-referential, servo-mechanical culture where the only hope of critical resistance was through the actions of artists. While Vertov championed collective action in a collectivist culture, McLuhan championed individual resistance in a society that functioned on the basis of liberal humanistic values; that was, in others words, defined in terms of "a coherent, rational self, the right of that self to autonomy and freedom, and a sense of agency linked with a belief in enlightened self-interest" (Hayles 1999: 85–6). This function was highlighted, for example, in Youngblood's April 9, 1971 response to *La Région Centrale*.

McLuhan's insights create an unusual perspective through which to interpret *La Région Centrale*'s early audience reactions.[15] Of particular interest are the comments by Youngblood and John Shipman. Youngblood's ironic statement that "I've always felt that I was the center of the Universe but I had no proof until I saw 'La Région Centrale'" can be read as a bold affirmation of McLuhan's comments on the Narcissistic position of the human organism vis-à-vis media,

especially in relation to the mirroring of a subject's camera-based perception of its own spatiotemporal centrality in the world. Shipman's comments on the relationship between viewer, vision, machine, and medium in the context of his experience of *La Région Centrale* provide a similar point of view on mirroring and feedback relationships between audience, film, and its authorial camera-machine system.

> Yet the most important thing is the machine fixed to the earth as we are in our chairs. Thought is the tremdous [sic.] mass/energy that creates the phenomena. On film is the result, the cause fills the empty chairs. The film of this film is seen not means. *As it is shown it is seen and the seer is its cause, the seeing its causing, seeing as causing* (my emphases).

Shipman' statement draws attention to the fixity of the camera-machine system vis-à-vis the audience (observer) and the resulting mirroring and film/audience feedback economy of

> seer(camera)/seen(landscape)/←SCREEN→/seen(screen/film(seer(camera)/seen(landscape)))/seer(viewer)

implicated in the spectator's eye-I relationship to the script-improvisations/input system/camera-eye/landscape subject matter ↔ film as process of identity production. As another viewer, Kristina Ziobro, noted, this economy raised fundamental questions about the transference of identity between film-machine and viewer.

> I was bound and determined to sit through the full three hours of La Region Centrale and I did, but the last half hour was traumatic. I thought that I would be forced to stand up in my seat and scream for the camera to stop until I accepted that it wouldn't because I had no control over it, I was part of it. Back and forth, back and forth, around, down and up. I am not what I see but I am what I feel about when I see. Seeing Snow's film is a stoning experience. (MSF-TLA, 47–4 "Structural Cinema, Vancouver Art Gallery, 1972; re: *La Région Centrale*," Kristina Ziobro)

Another viewer formulated their reactions in an appropriately poetic form:

> give in
> be fixed
> just enough on an image
> that eyeballs roll in their sockets

> unhooked of nerves
> that translate image to brain
> to thought
> no thoughts
> only barely hooked rolling of picture
> locking in now and then on the X
> yes, it is X
> it slides
> it is fixed
> eyeballs glide in their sockets
> X
> and off to more rolling not thinking. (MSF-TLA, 47–4 "Structural Cinema, Vancouver Art Gallery, 1972; re: *La Région Centrale*," M. McCafferty)

These comments resonate with some of Hearn's May 1971 remarks which raised similar questions of transference: "The audience no longer resists this new perception of motion and space, but attunes itself to the deeper identity of the film" which was situated in the film's relationship with its subject matter ("the depicted landscape") and hence also in relation to the camera-machine at its origins (MSF-TLA, 47–4, "Structural Cinema, Vancouver Art Gallery, 1972; re: *La Région Centrale*." M. Hearn, May 1971, 3). Such reactions suggest that a hybrid film-based machine identity—incubated *within* the film experience itself.[16] Thus when film transduced viewers into its realm thus absorbing their consciousnesses, the process was accompanied by experiences of transference. Some reactions (Youngblood, Shipman, Hearn for instance) suggested a mutation in a viewer's *self*-consciousness that led to an awareness of a parallel transformation in identity. How can visual information of the kind that composed *La Région Centrale* possibly serve as a medium for such a mutation? I ended Chapter 3 by stating that *La Région Centrale* embodied location. Snow's manuscript notation at the bottom of Hearn's testimonial "You should see the 3-hr. final version . . . —it's a whole different place—" supports this assertion without providing additional details. What is the relationship between this embodied location and the film's deeper identity? To answer these questions, one must explore *La Région Centrale*'s ritual structure and social functions in greater detail.

4

La Région Centrale: Liminality, Knowledge Production, Pedagogy

The November 1973 issue of *Artforum* contained the first of a detailed two-part analysis of Snow's landscape film. Its author, John W. Locke, saw *La Région Centrale* during a New York screening on May 27, 1971, at the recently opened (November 30, 1970) Anthology Film Archives.[1] Locke's articles were the first major scholarly review of Snow's film and the first to minutely map its impact on a spectator's understanding of film language, its limits, and its possibilities from both perceptual and film history viewpoints. Locke's two-pronged approach was designed to introduce the unfamiliar reader to *La Région Centrale*'s complexity and multilayered sensory experience. It is not surprising, given his background in the philosophy of language, that Locke's basic frame of reference would be the visual parameters and conventions of everyday experience. His two articles were designed to promote the filmmaker as an important artist and to introduce readers to two basic reasons for *La Région Centrale*'s historical significance.

In a July 9, 1973 letter to Annette Michelson, Locke presented his arguments for the publication of two distinct yet related articles on Snow's film. In the first place he noted that "Snow is in the position of being well thought of but not having had serious attention, with the exception of your *Wavelength* article." Locke went on to argue that "Snow's work needs critical attention now, and I think he deserves having it presented in a way that would emphasize his standing in relation to other filmmakers."

> It needs to be emphasized that he is much more than just one of the New American Filmmakers and having the belated criticism of *La Région Central*[*e*] be of normal length might be taken as indicating that it was a normal film and Snow was a normal good New American Filmmaker. I think the criticism of *La Région Centrale* should physically reflect what a big film it is. People who never

> read anything should be able to understand from looking at the layout and length that Snow is a very special artist. (Letter from Locke to Annette Michelson, July 9, 1973, courtesy of John Locke)

The articles were to be divided according to two sets of arguments because, as Locke pointed out, "arguments for why the film is fine and why it is important are separate ones."

> The piece is structured so that Sections I and II are about why the film is important and the remaining sections are about why the film is fine. This structure divides my piece into two approximately equal parts and ideally it would be published in two issues . . . This distinction between being important (or of consequence) and being fine (or of quality) is roughly that anyone can *understand* the importance of the film, but that *sensing* its quality depends on sensibility or taste.. . . I structured the Snow piece into sections because I wanted to emphasize that the two aspects of the work could be treated separately and that *La Région Centrale* was first rate in both these respects.

Locke was also concerned that it was important "that New American Films be seen in relation to the history of ordinary cinema" (letter from Locke to Annette Michelson, July 9, 1973, emphases in the original). Layout was also an important aspect of the articles' reception as is indicated in a draft letter from Locke to Snow (draft letter, Locke to Snow, 1973, courtesy of John Locke).

The two articles (the second one published in *Artforum*'s December issue) presented a sequence of arguments that supported Locke's claim that the film occupied a unique position in the history of mainstream *and* avant-garde film. These early texts are important documents concerning *La Région Centrale*'s critical reception and its perceived place in film history. They built on "Toward Snow" Annette Michelson's authoritative analysis and historical contextualization of *Wavelength* that was also published in *Artforum* in June 1971, and they complement other early audience reactions (Hearne, Shipman, Youngblood, Ziobro).

Locke inaugurated his article with a challenging statement: "Michael Snow's 1970–71 film *La Région Centrale* is as fine and important a film as I have ever seen." He then went on to point out that "It is an unimaginable film."

> . . . can you imagine a film constantly demanding concentration on the screen lest some of the action be missed, a film without people, in which the camera never stops moving, never moves more than four feet from a central point

> and never tracks, dollies, or is hand-held? Snow's film is literally like nothing you have ever seen before. It is such a radical, difficult film that if you are to understand its importance and uniqueness, some preparation may be required. (Locke 1973a: 67)

He then set out to "prepare" the reader for this unique encounter.

Locke claimed that the film's radical sensory experience resided in the "sweep of the camera movements," whose origins he traced to Snow's specially designed machine (1973a: 67). He argued,

> The importance of the film results from these camera movements. Regardless of whether the camera moved or not, in previous film the camera has been made to function within each shot predominantly as a vicarious human eye. The camera basically recorded what you might have seen in the process of moving about, in, or standing before an environment. You might stand or sit or move alongside what was happening; the camera mimicked these forms of observing the world. *La Région Centrale* is the first film in which we see the world entirely through shots which are not based on our everyday way of seeing. (I take it that falling off motorcycles at speed, jumping out of airplanes, and somersaulting off diving boards are not ordinary ways of seeing the world. People who do these things do not usually look at the scenery.) *La Région Centrale* is the first feature-length film of the world of ordinary objects which consistently adopts a point of view unique to the camera. (1973a: 67)

For Locke, the film's particularity was the result of the camera activating machine's spatial dexterity as expressed through its landscape subject matter.

Locke turned to the Soviet filmmaker Sergei Eisenstein, and montage theory, to refine his argument concerning *La Région Centrale*'s contribution to the history of film. Locke claimed that "This film is as radically different from other contemporary films as Eisenstein's in the 1920s were; and it is different in an analogous way."

> Editing had been used well before Eisenstein, but he was the first to make it the dominant stylistic characteristic of a film. Likewise there are beautiful examples of camera movements similar to some of Snow's in older films, but Snow has produced an entire film composed of these movements. Interestingly, Eisenstein's montage was also a way of making a film of the world of ordinary things that differed from the way we usually perceive them. We neither see the world as a sequence of discrete shots as in Eisenstein, nor as a continuous sweep as in Snow. In an Eisenstein film it is the connection between the shots which makes

> the viewer aware of the differences between seeing a film, and seeing the rest of the world that's not on film. In *La Région Centrale* it is the camera movements within the shots which produces this awareness. (1973a: 67)

It is strange that Locke should have picked Eisenstein and not Vertov as his guide in measuring *La Région Centrale*'s contributions to film history, even though *The Man with a Movie Camera* would have been more a appropriate model (notwithstanding that fact that its subject matter was a modern urban city and not a vast Northern Quebec landscape). There was no shortage of correspondences between the two films. On the one hand, Vertov's kinoks units were constrained by the human body's movements and ultimately each unit's "point of view" was determined by a body's height, or its capacity to place itself in different and unusual locations (in a hole between railway ties, on top of a building or factory chimney, in a mine, etc.). The resulting shots being used, as in the case of *La Région Centrale*, to trigger conditions of sensory defamiliarization in a theater audience. The variety of camera viewpoints that were possible (in a wide-ranging exploration of urban and industrial spaces) was also abundantly demonstrated in *The Man with a Movie Camera*. *La Région Centrale* was, in contrast, the product of a different strategy where the camera was fixed in place, on location, and programmed to produce images according to a repertoire of scripted and improvised movements. Its shots were "continuous" and determined by the length of a roll of film. Why were Vertov's theoretical and practical contributions to a history of machine-based autonomous camera movement ignored? One suspects that Locke's interest in Eisenstein could have related to the latter's use of montage in his fictionalized narratives. Such use created a more direct and smoother interface between Soviet montage theory and Hollywood film (one of Locke's principal objectives in discussing Snow's contributions to film history). However, notwithstanding Vertov's absence, the question of the mechanical treatment of shots in Snow's film retained Locke attention and he proceeded to analyze their pictorial qualities as a function of the mechanical foundations of a new form of film language.

Locke explored the distinction between discrete shots and camera movement within shots later in his article when he again focused on the question of montage, this time in the context of André Bazin's division of film history according to the traditions of montage or antimontage (Locke 1973a: 68). He focused on this distinction because it provided another measure of *La Région Centrale*'s significance. He noted, for example, that "One basic difference between these

two styles of films is that those in the antimontage, realistic tradition tend to show space as a continuum by using long takes, moving cameras, and character movements within shots, while those in the montage tradition tended to break space up into separate shots" (1973a: 68). While Locke acknowledged Bazin's contribution to film history, especially his contribution to defining a film's visual and formal contributions to that history, as opposed to its psychological or sociological contributions, he was especially interested in Bazin's idea of invisible montage—a use of montage that was "so unobtrusive as not to be noticed"—because it allowed him to draw an interesting parallel with his concept of empty space pans: "camera movements over 'empty' space, a space without people or prominent objects in other films" (1973a: 68, 67). Locke noted, "The space pans are shots in which space has been kept together in one continuous sweep instead of breaking it into separate shots, so they are an example of the antimontage tradition Bazin favoured." He went on to point out, however, "they have been overlooked in the same way that invisible editing has been."

> Both are examples of stylistic features which are neither discussed nor consciously noticed. The space pans you will begin to see after watching *La Région Centrale* are invisible antimontage; they were so invisible that Bazin paid little attention to them. (1973a: 68)

There are clear reasons, in making a distinction between montage and antimontage filmmaking practices and their association with stylistic as opposed to structural/political features, why Locke might have chosen not to reference Vertov's practice in his discussion of *La Région Centrale*'s significance; even though his comments raise questions about the relationship between editing strategies and perceptual experiences in the history of film.[2]

There is an implicit distinction in Locke's analysis between formal/stylistic editing strategies (that would be associated with an aesthetico-historical consciousnesses of the *materiality* and formal parameters of a medium like film) and other types of visual strategies (such as the use of a social, extra-filmic form of montage-based editing) that could be used to cultivate a heightened consciousness of the sociopolitical functions of different kinds of perceptual, aesthetic, and social forms of knowledge that might also be reflexively founded on a medium's materiality. Knowledge, for example, that could take an organizational form as in the case of Kino-Eye. Locke acknowledged, for instance, that he had ". . . been arguing for the importance of *La Région Centrale*

by pointing out that camera movements related to those found in it can be seen throughout the history of film and claiming that Snow's film can lead us to understanding and appreciating these movements" (1973a: 69). However, their use in visible or invisible forms had consequences on the way a viewer processed visual information and thereby engaged with the issues that a film raised. While Locke did not pursue his insights further in the direction of film's potential contributions to social and political knowledge and change (beyond his brief reference to Eisenstein's use of montage as a way of creating visual tensions between film reality and "the world of ordinary things"), he did place a great deal of emphasis on *La Région Centrale*'s successful formal solutions to the problem of "pure frame movement" and the fact that its solutions took the form of "a film fine to experience"—a phrase that seems to have been used to disarm readers who might have been hostile to his analysis or experimental film's dynamic visual onslaughts (1973a: 67, 70).

Locke astutely positioned Snow's film between classical and avant-garde film technique and language; and, through subtly constructed analysis, he cleverly pointed to its didactic value as tool and *method* to reassess film history and theory. This, in addition to the primary reeducational potential that resided in the film's promotion of "new perceptual categories" and experiences (1973a: 67). But Locke's understanding was not limited to formal issues, visual pleasure, or *La Région Centrale*'s didactic uses. He went on to discuss further aspects of the film's originality, in the context of film history, when he suggested that *La Région Centrale* "is simultaneously a solution to another group of cinematic problems. How can a film be made in which the camera does not mimic the human eye? How can a film be made which looks like nothing the viewer has ever seen before? How can a film be made which is not based on the viewer's ordinary way of seeing the world?" (1973a: 70). While Locke noted that some answers could be found in Snow's earlier films, *La Région Centrale* represented, in his estimation, an especially successful and radical solution to them.[3] It was also at this point that one might have expected Vertov to appear as a protagonist and *The Man with a Movie Camera* to be introduced as an indispensible historical and formal reference in his discussion. One would expect this because of *The Man with a Movie Camera*'s unique answers to Lock's analysis and claims. Instead, he continued to analyze Snow's film without placing its pivotal camera-machine system in lineage with Vertov's kinoks cameraman units or the movie camera/tripod's animated, autonomous evolutionary successor "who" had made a brief, yet startling appearance at the beginning of the reincorporation phase of Vertov's

1929 visual manifesto. This omission is also surprising because their films could easily have been treated as complementary documentary "limit" cases.

Snow had already suggested that his film's success was not based on classic editing strategies but rather on the application of a score to govern the movements of a camera via his camera activating machine system. Even when considered from this viewpoint, Vertov's animated camera-tripod unit should have been considered to be a direct precursor of Snow's remote controlled camera activating machine because its movements, however primitive and uninspiring, were also "scripted" in advance. As Locke realized in connection with the system's capacity to produce a novel translation of conventional human sensory experiences, "It's not just unlikely that you would do what the camera did; you just could not move in the way the camera did."

> If you went to the Canadian mountaintop where the filming was done, you could not see the landscape as the camera did without a sort of mechanical assistance that does not exist. *La Région Centrale* is so visually radical that it is not even composed of extensions in time of visual acts you have already consciously performed; you have never moved in the way Snow's camera moves. The camera did not mimic the human eye, and you cannot mimic the camera. This is why I say that Snow has made the first autonomous camera film. (1973a: 70)[4]

Locke argued that *La Région Centrale*'s uniqueness was a function of its location, mechanized camera movements, and its spatial characteristics *as measured against the film/screen frame*. They coalesced in the novelty of the film's "empty space pans" and its particular solutions to the problem of "pure frame movement" (1973a: 67, 70). These were two of the basic characteristics that made the film stand out in relation to the history of film; and of course they were produced by the camera activating machine's unique movements. Since the communications relay that produced these movements included a script and handheld console, one can draw a parallel between Vertov's "program" as embodied in Kino-Eye (its social organization and system of observation/manufacture) and its implementation by the kinoks. The correspondence is most compelling when one treats both as important stages in the "evolution" of machine vision and its relationship to a collective posthuman identity.[5]

Locke was interested in providing a complex yet clearly articulated pedagogical frame of reference for gauging the innovative nature of *La Région Centrale*'s visual language. This frame determined his approach and choice of

analytic viewpoint. It was constructed in terms of the film's historical *reception* and its roots in the camera activating machine's repertoire of movements and their space/time expansion capabilities. Locke's analysis engaged *ipso facto* with *La Région Centrale*'s unique machine *vision* characteristics, but not necessarily their *transformative* impact on a viewer's identity. His flawed claim that Snow had produced the "first autonomous camera film" was nevertheless interesting precisely because he set the stage for a discussion of these characteristics which, in turn, provide a provisional basis for a comparison of Snow's film and *The Man with a Movie Camera*. For both films contributed in important ways to *a film-based history of machine vision* (as opposed to film history, Locke's primary conduit, in his articles, for attaining his objective of initiating his readers to *La Région Centrale*'s complex visual experience). Once instituted, this comparison reveals that contributions were not limited to different types of camera-machines (including that of a Kino-Eye "machine" in Vertov's case). They also encompassed the visual effects produced and objectives to which these effects were harnessed.

Although Locke pointed to the fact that one's arms and waists do not move in a way that *La Région Centrale*'s machine-interfaced camera could, he did not pursue its implications further or explore the possible existence of symbolic correspondences. In other words, even though one cannot behave in the way a machine does, since it has a potentially unlimited capacity to maintain complex cycles of movement over extended periods of time, mechanical actions are often modeled on the human body and human behavior (Rabinbach 1992; Seltzer 1992). While *distinctions* between machines and the human body's work capacity suggest a non-anthropomorphic model for *La Région Centrale*'s machine vision, formal/symbolic correspondences between the camera activating machine's structure and the human body's form draw attention to filiations that could be important indicators of the existence of a common interface and identity matrix. If Locke omitted to explore it in detail, he did implicitly trace out some of its features. Further comparative analysis can expose some of the matrix's panhuman characteristics.

Beneath an ideal collective Soviet citizen, symbolized by Vertov's inquisitive perambulating cameramen, and a cosmically consciousness individual in *La Région Centrale*'s case, there was a common identity matrix that was machine-based. However, in both films, this identity was promoted through an anthropomorphized camera-machine system that implicitly formated

(according to a human body's height and the maximum outreach of its arms) the resulting shots, through different visual/narrative strategies, whether the system was absent (or obliquely suggested through the mysterious presence of shadows) in *La Région Centrale* or was present (and constantly represented) in *The Man with a Movie Camera*. Thus, if identity was materialized through the film's projection, the question of its location took on a very different, distributed meaning in each case.

La Région Centrale's radicality—as measured through machine- and programmed-based automation—was tempered in terms of Snow's "humanism" which was implicitly and symbolically expressed through the form and dimensions of the film's camera-machine system. *The Man with a Movie Camera* attempted, on the contrary, to metaphorically project itself beyond the constraints of this type of humanism by absorbing its conditions of existence and dissimulating it throughout the matrix of a camera-based visual culture, but only to find itself imprisoned within the pictorialism of its pivotal Camera/Eye metaphors, even though it would attempt to project its imagination beyond their boundaries as in the case of the animated tripod/camera sequence. In contrast, *La Région Centrale* was turned inward, as Locke suggested, not only to engage with the technical—camera-based—parameters of its film language and production history, and therefore with its media-based conditions of existence, but also to reach through its absent center to a cosmic condition of existence once the viewer was able to perceptually displace him/her self into the void that marked the presence of the absence of the camera activating machine and therefore the *location* that it had claimed in its own name and origins. As Youngblood had noted, *La Région Centrale* placed each viewer at "the center of the Universe;" and as Shipman pointed out: "As it is shown it is seen and the seer is its cause, the seeing its causing, seeing as causing." In a powerful perceptual/educational sense, this absent center created the liminal conditions for the radical camera-based pictorial vocabulary of cosmic experience to exist and be deployed in the service of a transformation of consciousness, of the kind that early viewers attempted to put into words. This was one of the fundamental characteristics of its socio-aesthetic posthuman rite of passage function: The transmutation of exterior into interior location triggered a simultaneous transmutation in human consciousness. The transmutation took place through the medium of machine vision and its message concerning its different way of *seeing*, *imagining,* and *existing* in the world.

The complexity of a visual language and the mysteries of an implicit structure

La Région Centrale's intense sensory experience ensured that questions of reception and analysis would be intimately entwined. In some cases (Locke, for example), the writer could function as a liminal pedagogical figure in relation to the early reception of Snow's visual work. In other cases, potential pedagogical roles would meld into a post-liminal network of analysis and interpretation. Let us begin with a 1980 example.

Regina Cornwell, discussing *La Région Centrale* in *Snow Seen* (1980), argued that it was unnecessary to provide a detailed analysis of the camera movements implicated in the film's creation because there were moments in the film when the visual experience defied description. Turning to examples of Snow's earlier films, she argued that "an absolutely accurate description of *Wavelength* or ←——→ is not synonymous with a phenomenological one."

> A rather detailed chronology of events was given for ←——→ in chapter 6, yet the viewer recalls very few of these in their correct order. Variations on action and reaction reinforce the panning and the overall central idea. In *Wavelength* one tends to recall the order of the human events because of implied causal relationships, but other occurrences—light and colour changes and the moments of identification of the pictures on the wall—cannot be precisely registered and measured phenomenologically in the perceiver's time. (Cornwell 1980: 115)

Cornwell then focused on *La Région Centrale* and the unique difficulties of describing its effects on the viewer:

> *La Region Centrale*, however, presents other problems. One can described the film in terms of its length, the number of its parts, its loosely linear progressions through day to night to day and its unity of time and place, along with a catalogue of types of movement and some of their combinations. It is useful to deal with certain parts more closely and precisely than others, yet a detailed description of all seventeen sections is unnecessary. Some of the movements almost defy verbal description because of what they do with angle and direction of compounded movements into and away from the screen surface. They must be seen as they visually describe themselves in space.

Cornwell pointed out that the film operated differently, when compared to Snow's earlier films, for "It is the large movements and the smaller variations of

kinds of movements analyzing the landscape which have their cumulative effect over the more than three hours of film."

> Thus the focus of the film is not really each individual camera movement per se or each section, but the consequences of the kind of movement Snow has coded for his camera, the relationship between the orchestrated movements and the "big space" and the respective place of and relationships among the machine-mounted remote-control camera, landscape and viewer. (1980: 115–16)

As in the case of Locke, Cornwell focused on the visual effects produced by camera movements as opposed to their underlying logic. In contrast, Bill Simon traced the roots of *La Région Centrale*'s spatial qualities to earlier montage-based films when he argued "Only a limited number of intensively edited montage works have explored the implications of totally entering a space and regarding the space from within, eliminating a sense of proscenium and the fixed vantage point." In other words, "in the history of the uses of camera movement, the camera has seldom been placed in the position of entering into a space and exploring the whole space from within" (Simon 1979: 97). Simon's observations, while correct, in the sense of acknowledging the importance of the camera/camera activating machine-landscape relation and the movements created, was incorrect when measured in terms of the film itself. *La Région Centrale* was the product of an *engineered* relationship between the possibilities inherent in the camera activating machine, the film strip considered as a regimented sequence of images, and the landscape considered as an open spherical space (literally spherical from the camera's viewpoint and in terms of the earth's form). The result, as in the case of *The Man with a Movie Camera*, was a film whose spatial logic was organized from the inside out (camera-camera activating machine plus geometric-spatial possibilities created by the adoption of a *circular* model for *each* of the camera's three major axes of rotation) and not vice versa; and it was this internal logic that was the point of departure for the spectator's experience of the film, which could only be defined in *its* terms. Space and time were not landscape-based, but, on the contrary, camera/camera activating machine-based. They were rationally engineered and not given or even intuitively created. However, there was, as Snow first noted in his April 1969 proposal and as Cornwell also argued, a big difference between the camera activating machine's inbuilt geometric-spatial capacities and the final product of its activities as defined by specific location and time period.

Commentators noted a few basic facts about *La Région Centrale*'s structure. First, its events were chronologically ordered. The film began at around noon

and it terminated around noon that next day (Simon 1979: 99; Cornwell 1980: 111). Second, there were three major sections divided into 16 or 17 subsections demarcated by screen-sized Xs.[6] The subdivisions were of various lengths from 30 seconds to approximately 30 minutes. There was an introduction that served to sensitize the audience to the film's subject matter. The introduction's key event was the first brief appearance of the camera activating machine's shadow. This section was preceded by a screen-sized X and it terminated with another screen-sized X. Locke noticed that the introduction also exhibited a tripartite structure consisting of a momentary still shot, a continuous camera movement, and a shot that appeared to be a still shot "but which is probably a moving camera shot." He observed, moreover, that the shot ". . . also begins on the ground and moves to the sky" (Locke 1973b: 70). For Locke, *La Région Centrale*'s opening 30 minutes presented an inventory of formal themes (frame edge concentration, grain motion, unseen movement) that were developed in unique ways during the remainder of the film (1973b: 69). Simon also treated this section as an introduction where ". . . the total space of the film is 'described' in its most coherent form." However, he went on to identify the section as "the theme" that was developed in the film's second stage as ". . . subsequent variations explore the space and ultimately transform our sense of the space through a rigorous and exhaustive articulation of the possibilities inherent in the camera apparatus and its placement in the landscape" (Simon 1979: 98). Besides noting its transformative nature, Simon also referred to the introduction's conventional qualities at the end of his article—a characteristic that Locke also noted:

> *La Région Centrale* began with a straightforward representation of the total space of the landscape. Importantly, despite the complexity of the camera apparatus, the view at this early stage of the film is not unlike one that a human being standing on the land mass could have. (Simon 1979: 100)

In contrast, Cornwell provided a basic description of the film's opening set of camera movements and the visual information they registered about the environment. This introduction terminated with a screen-sized X which also served as the interface with the film's second major section.

The exclusive nature of *La Région Centrale*'s central section was noted by each writer. However, it was Locke who developed its most sophisticated analysis. He initiated his inquiry by claiming that the section contained "camera movements unique to the film" (1973b: 70). He also used formulations like ". . . you know

that something is going on the likes of which you have never seen before" or, ironically: "Get the picture? Probably not, because it's a picture you haven't seen before." The basis for Locke's claims were clear and concise:

> The missing elements in the first section are the camera movements unique to the film. Even though the movements of the first section are an essential source of its value, they are temporal extensions of ones seen repeatedly in other films. In the second section the viewer can begin to sense the categorical uniqueness of Snow's camera movements. This means the movements of the first section can be described as a long series of pans and you understand what I am talking about. But when I describe a camera movement as rotating on the lens' centre or sweeping or a zigzag, you have no past experience of films on which to model you understanding. They are Snow's unique camera movements. They are as original as the crane shots in Griffith's *Intolerance* or Ozu's use of camera angles. It is the use of these original camera movements which gave Snow the power to produce a film which could sustain the viewer's interest for three hours. (1973b: 70–1)

Locke argued that it was these special movements that guaranteed *La Région Centrale*'s unique place in the history of film.

The second section of Locke's December 1973 article contained a long discussion of the film's visual qualities from the viewpoint of the spectator's experience and pleasure. This approach complemented the November article's arguments thereby reinforcing Locke's position as a "first viewer/analyst," initiator and liminal pedagogue. Locke reconsidered the special aspects of the film's formal language that had already been noted in his first article—"frame edge concentration," "grain motion," and "unseen movement"—and that he had linked to innovations in camera movement (Locke 1973b: 69).

Frame edge concentration was defined in relation to classic narrative film frame composition which tended, in Locke's estimation, to focus the viewer's attention on the center of the screen as opposed to its edges. In contrast, he noted, "One interesting aspect of watching Snow's film is that the viewer's attention is concentrated on the leading edge of the frame."

> If the camera is moving to the right, attention is drawn to the right side of the screen. When the viewer notices this, the sensation of how the film pulls attention to the edge of the screen can be consciously appreciated.. . . The pull of the leading edge is present in the movements I called space pans in other films, but in these only the tension of the pull of the edge exists because there is not enough duration to concentrate. (1973b: 69–70)

One of the novel effects of frame edge movement was exceptionally well illustrated, in Locke's opinion, in its second section where "the camera begins to make a twisting motion centered on its lens as it pans around the landscape."

> As a result of the two directions of camera movement the viewer's eyes are led around and around the edges of the screen. This is a new experience in the cinema, which exemplifies how the length and originality of the camera movements can be used for the eyes' gratification. In the sixth section there is an interval where the division between earth and sky forms a line bisecting the screen. When the camera begins twisting, the line functions like a pointing finger directing the viewer to look at seldom noticed parts of the screen. The pointer leads the eyes around and around the screen's edges. (1973b: 70)

Locke went on to discuss examples of "unseen motion" (instances of camera movement that were unperceived because the shots were of monochrome zones like a blue or night sky). He pointed out that "It is another play on our categories, for there is no standard phrase for a moving camera shot in which you see no movement" (1973b: 70). Moving grain effects were also related to unseen motion since it was against a monochrome background like the sky that the film grain became consciously visible as an essential element of the film's aesthetic composition and therefore of its perceptual experience. Locke noted, for example, that "The grain at the center of the screen seems to become enlarged, and to swirl madly about."

> . . . It is like looking at a living organism under a microscope, but you are actually looking at unperceivable camera motion and the making perceivable by motion of the stuff that film is made of. (1973b: 70)

The use of frame edge movement and moving grain effects were two of *La Région Centrale*'s most subtle *educational* techniques when considered from the viewpoint of the film's perceptual dynamics, and potential liminal function. They created, with other similar ambiguous effects (moon as optical disc or planet), a condition of sensory destabilization that could serve to undermine habitual frames of perception and reference. These techniques were important tools of change because they could act as harbingers for alternative cognitive/epistemological experiences. Space pans of the sky, where the visual reading of the image was mediated/confused by the emulsion-based grain motion, created an interface with the history of monochrome painting as did the movement of the camera around the axis of its lens which promoted an exploration of the

frame in formalist painterly terms. Frame edge movement created an interface between the languages of cinema and painting that was based on a common conception of the frame as limit between inside and outside worlds.

Frame edge movements defined both the nature of the visual boundaries of the film frame as image/picture *and* its relationship to the spatiotemporal interfacing *function* of the camera as translational medium between three- and two-dimensional worlds. These movements allowed eyes to explore and appreciate the frame's aesthetic and epistemological characteristics. The viewer was thus encouraged to probe, in the camera's company, the questions of pictorial limits, spatial boundaries and the nature, function, and limits of machine-based vision. Such questions were also addressed through the immersive experiences proposed in many of the multi-media works of the late 1960s. However in their cases, immersion was a way of denying the existence of such limits and functions, as the rubric of "Total Art" would suggest (Henri 1974; Roberts 2011). In contrast to immersive/total environments, Snow kept the traditional parameters of cinema viewing in place while probing and challenging them through, for example, the camera's spherical motion around a fixed position in space. Frame edge movement and antigravitational camera lens rotation created antithetical relationships with conventional fixed frame cinema- and theater-based viewing conditions of the period (spectator's frontal orientation vis-à-vis the screen rectangle and its renaissance picture window tradition/function).[7] Snow was thus able to create a perceptual and phenomenological experience of dislocation and, as a consequence, a potential antigravitational experience of the kind that astronauts were familiar with through simulations and space travel. Location was thus simultaneously and ambiguously situated on earth, within a theater and in a simulated outer space. In contrast, immersive environments simply embraced the magic of illusionism in order to eclipse the problem of location and the frame.

McLuhan captured the profound cultural significance of this new kind of esoteric experience when he commented that "The extreme form of this implosion or contraction [McLuhan was talking about an electric media-based reversal of a print-and silent movie-based 'mechanical age of explosion and expansion' 'into other cultures'] is the image of the astronaut locked up into his *wee bit of wrap-around space* [Figure 4.2]. Far from enlarging our world, he is announcing its contraction to village size. The rocket and the space capsule are ending the rule of the wheel and the machine, as much as did the wire services, radio, and TV" (McLuhan 1964: 258, my emphases).

By placing viewers *inside La Région Centrale*'s "spherical space," Snow had in fact created a situation in which each person was psychically relocated in the film's own "wee bit of wrap-around space." Each viewer was placed in a situation of contradiction in relation to a vast open landscape space, the film's continuously unfolding and shifting spherical space, the dark and intimate meta-wrap-around space of the theater, and the cold infinite expanse of cosmic space (Figures 3.2, 4.1). There is something compelling about an analogy between the astronaut's helmet, its mirrored visor, and *La Région Centrale*'s presentation of the camera's omnidirectional reading of space on a flat two-dimensional screen (Figure 4.2).

To correlate the astronaut's curved visor and the cinema screen's flat surface limits the analogy's capacity of "total" synthesis. However, the fact that *La Région Centrale* created swaths of curved spaces (through the camera's trajectory) within a hypothetical sphere does open the way to the wide range

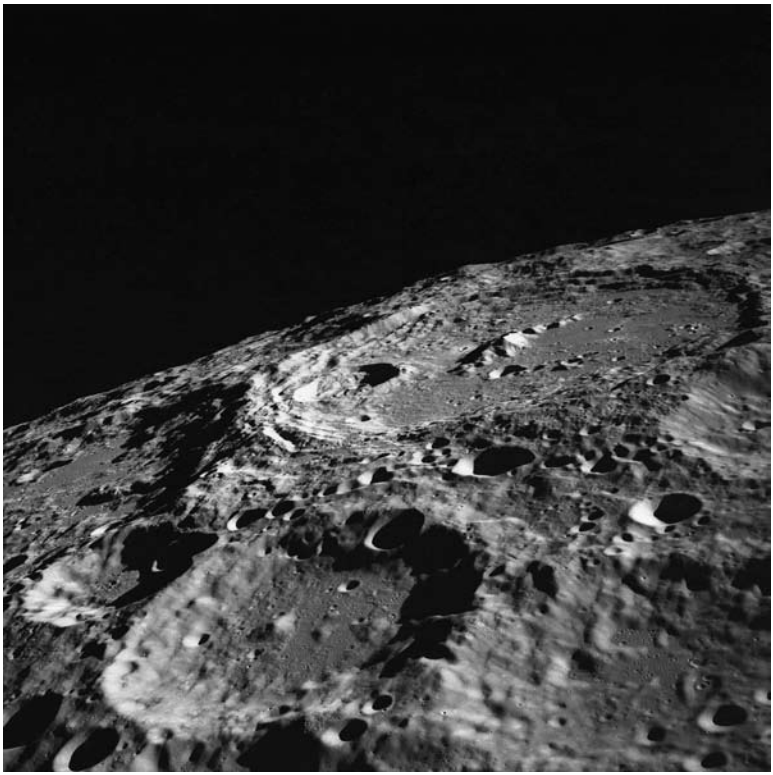

Figure 4.1 Oblique view of International Astronomical Union (IAU) Lunar Crater 302, Apollo 10 Mission, May 23, 1969. NASA Photograph AS10–32–4823.

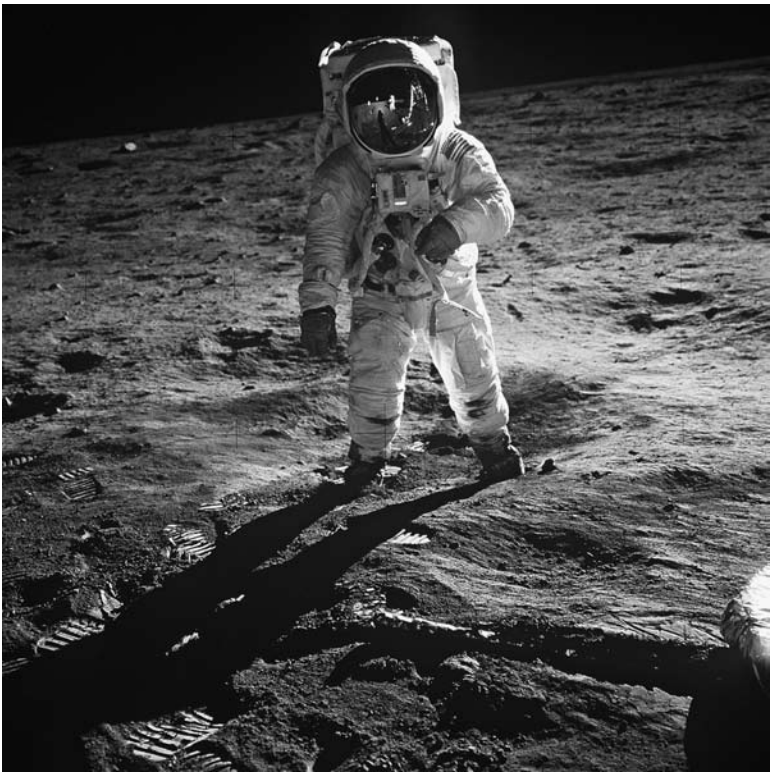

Figure 4.2 Astronaut Edwin Eugene "Buzz" Aldrin Jr on the surface of the Moon, July 20, 1969. Nasa Photograph AS11–40–5903.

of extraterrestrial references that could be accommodated within *La Région Centrale*'s cultural archive of allusions, annotations, and propositions.

The potential physiologically effects of this pseudo immersive "wee bit of wrap-around space's" virtual, mind-based "cosmic" experience was confirmed by another of the central section's shot sequences. While there were shots where the velocity of the camera movement transformed three-dimensional "pictorial" space into two-dimensional abstract surfaces, there was another type of shot that created a unique sort of visual ambiguity that focused viewer attention on the image/screen surface in order to raise questions about its perceptual/phenomenological status and the viewer's ability to return to earth in a gravitational/perceptual sense or, on the contrary, to openly acknowledge and embrace his/her new found antigravitational experience with its potential origins in extraterrestrial travel and an "unlimited cosmos." This relationship was suggested by Simon when he argued that the camera activating machine

created a condition in which the ". . . camera can be understood as being in orbit" (Simon 1979: 97). Simon was referring to Snow's description of *La Région Centrale's* camera as moving ". . . around an invisible point completely in 360 degrees, not only horizontally but in *every* direction and on every plane of a sphere.. . . So that there are circles within circles and cycles within cycles." And, as Snow concluded, "Eventually there's no gravity. The film is a cosmic strip" (Snow 1971: 47, emphasis in the original).

Snow's description pointed to *La Région Centrale*'s radical form of reflexive materiality. The simulation of an orbiting moon-like object (camera) around a mother planet (camera activating machine) was significant inasmuch as it provided an important symbolic link to some leading communal events of the late 1960s/early 1970s, in particular space travel with its ability to focus global attention not only on what appeared to be the progressive aspects of American culture, but also the earth's diminutive place in the cosmos.[8]

The relationship between the camera activating machine's moving parts replicated not only a moon/earth relationship (camera movement in relation to the structure's central post, with all that this implied in terms of its anthropomorphism), but also the relationship of an earth or moon orbiting space capsule (movie camera) feeding back extraterrestrial information to the darkened cinema (earth or home base). The word "cosmic" could take on a very different pragmatic meaning when associated with a 1960s history of space travel (Figure 4.2). There was, in addition, the compelling photographs released by NASA of the first space walks which presented dramatic images of astronauts floating in space tethered, through their life-sustaining "umbilical cords" to a space vessel (Figure 3.2).[9]

Locke, Cornwell, and Simon noted a key section in the middle of the film that consisted of an X demarcated subsection (Locke, section 9, Cornwell, section 10) devoted to camera movements that created a dialogue with a circular, then oval shape that was in fact an image of the moon. The moon's frame-bound perambulations against the background of a night sky created a heightened condition of perceptual ambiguity that was distinct from earlier and later situations of visual/optical ambiguity (Locke 1973b: 71; Simon 1979: 99; Cornwell 1980: 114–15, 116). Locke provided the best description of this key subsection.

> It is night and the images are composed of circles of light tracing arcs across corners of the screen. It looks like an abstract film, but it is actually composed of moving camera shots of the moon. This is . . . a more complicated form of a camera movement that cannot be perceived as what it is. You know the camera

> is moving and you see movement, but you cannot make the image correspond to your knowledge. No matter how you concentrate, the circle of light still appears to move across a dark screen instead of the camera appearing to be moving around the landscape and moving across the moon once on each revolution. (Locke 1973b: 71–2)[10]

It is worth noting that the moon's perambulation could easily be interpreted as a camera lens exploring the space of the frame. The metaphor could be extended to encompass the white disc's intimate relationship to light (flashlight, projector beam, cosmic source of light). The moon could also serve as a proxy for the camera lens' presence in another (cinematic) dimension of reality. (One is reminded here of the numerous appearances of camera lens/human eye metaphors in *The Man with a Movie Camera* as well as the film's references to the projector and film projection.)

Camera movement round the lens' axis created a similar perceptual/cognitive condition of ambiguity coupled as it was to its synchronized knowledge generating movements round the frame edge. Locke argued that it was "a new experience in the cinema, which exemplifies how the length and originality of the camera movements can be used for the eyes' gratification." But there was also a distinct educational function to this type of movement that piggybacked on the eye's visual pleasures. Locke focused, as previously noted, on one of the movement's peculiar effects when he noted that a bisecting centrally placed horizon line functioned, as the camera twisted around its axis, as a "pointing finger directing the viewer to look at seldom noticed parts of the screen" such as its "edges" (1973b: 70).[11] These effects were based, as Simon (1979: 97) also pointed out, on an orbiting camera.

> In effect, with the three basic moving parts of the apparatus performing 360° rotations, the camera can be understood as being extended in space, rotating on its own axis, while being turned at the same time in two separate circling orbits. (1979: 97)

These responses to *La Région Centrale* suggest that a "third" transcultural space was triggered in the viewer's mind; the extent of the perceptual violence of the encounter between viewer and film being defined by the visual/formal and aesthetic effects of the film's camera movements as they played out against that viewer's expectations, the latter more or less deployed against the backdrop of different histories of each medium (realist/formalist painting on the one hand and Hollywood/experimental film on the other hand).[12]

La Région Centrale ended with a climax in which the visual information was rendered "incoherent" and the sound track was disarticulated from any potential image-based frame of reference (Locke 1973b: 72).[13]

The film's sound track (which I will discuss in the following section) was divided into three parts: the first, where the image/sound relationship was presented in counterpoint; the second where it was roughly correlated, and a third where it terminated in counterpoint (Locke 1973b: 67); the latter producing, as a consequence, a mirrored relationship between *La Région Centrale*'s opening and closing sections in much the same way as *The Man with a Movie Camera*'s opening and closing cinema scenes functioned in a mirrored fashion. The film ended in a "sun-bleached frame of white light" and then a final screen-sized X that, again, echoes *The Man with a Movie Camera*'s closing shot (Cornwell 1980: 115).[14] However, in contrast to the latter's powerful terminal image of the fusion of human/machine organs of vision and the ensuing darkness that it creates as the movie camera's iris diaphragm closes down, *La Région Centrale*'s final shot was in Locke's estimation "either the same sort of apparently motionless image of the sky that ended the first section or a shot holding still on the sun."

> It's hard to say exactly what you are seeing; by this last shot it is ambiguous to the viewer whether there is motion or just light. Both the first section and the film move from ground to sky, and from stillness through motion to a stillness that may be an image of motion. (Locke 1973b: 70)

This return was signaled in a different way by Simon when he acknowledged P. Adams Sitney's proposal that the "final section constitutes a metaphor for consciousness" but suggested that a more accurate metaphor could be described "through the optical illusion which is operative at this point in the film."

> The land mass can be understood as moving through the sky much as a planet orbits in space. Our conceptual perspective towards the land mass has been totally altered and, very importantly, it is the orbiting movements of the camera itself, at a very accelerated rate, which create this new "planetary" perspective. (Simon 1979: 100)

This conclusion was in marked contrast from the one Simon proposed—which I have previously noted: that the film "began with a straightforward representation of the total space of the landscape" and that the resulting view was "not unlike one that a human being standing on the land mass could have" (Simon 1979:

100). Both observations have a common reference: the viewer exchanges positions with the camera, as in the case of classic films, but finds him/her self in a different—extraterrestrial—location that is situated at an artificial interface between two types of infinite space: the deep space of the Universe and the "infinite" space of a sphere (earth) that has no actual concrete *geometrically* defined limit (as opposed to geographic, political, social, or cultural ones) when considered from the viewpoints of the trajectories that are possible around its exterior surface. This is what *La Région Centrale* demonstrated with the results of its "spatial research" in a Northern Quebec landscape.

The culture and symbolism of acoustic communication

In his April 1969 proposal Snow described two methods of producing a sound track for his film. The first was based on a form of mimicry. The second was based on the use of electronic tones to control the movements of the camera activating machine. Before addressing the complex command and control relationship of the latter, it is worth briefly noting how the former would be achieved.

> The sound will be sync. sound but recorded with the microphone travelling in the same pattern as the camera so that the qualities of the sound will equal that of the image, diminishing in volume etc. when further away from the source. The dialogue and natural sound recorded will be augmented and enhanced in studio re-recording later. Some of the sound of the machinery used to move the camera will be used or simulated. (MSF-TLA, 10–4, Landscape (Earth), typescript, April 1969, 5)

Snow's initial idea concerning the film's soundtrack was relatively conventional, based as it was on a quasi-documentary approach that was enhanced through additional sounds added during postproduction. However, Snow finally settled on the idea of producing a sound track based on the electronic tones that would have been used to communicate with the camera activating machine (Figure 4.3).

Pierre Abbeloos' tape-based instruction machine was tested and it worked, but the transfer of Snow's score would have taken months so Snow decided to produce another sound track that was modeled on it.[15] This sound track was produced and post-synchronized using a small custom-built synthesizer in a

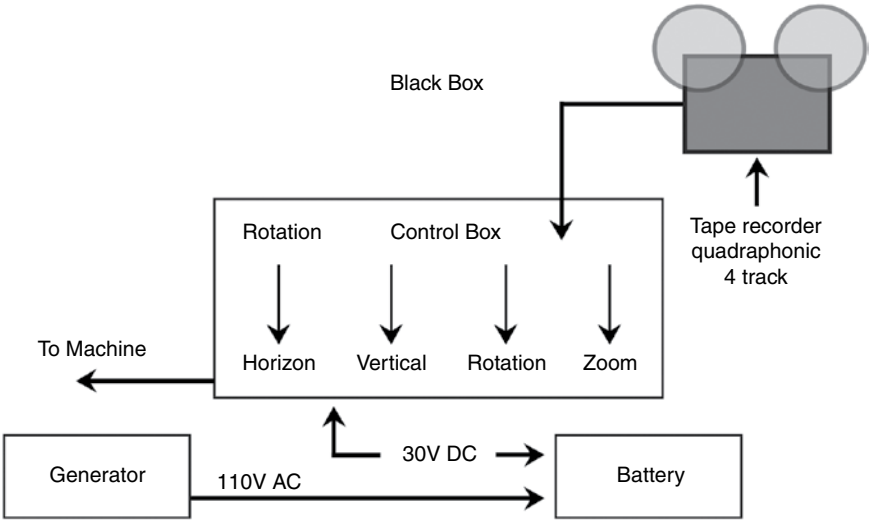

Figure 4.3 Diagram of the components used for *La Région Centrale*'s abandoned audio control system for use with the camera activating machine. Based on a sketch by Pierre Abbeloos presented to the author during an interview conducted on August 17, 2010.

studio in Montreal (Snow, email to the author, July 27, 2010). Snow described its complicated role in his film in 1971.

> I composed the camera movements, made an overall score for the film. Pierre [Abbeloos] worked out a system of supplying the orders to the machine to move in various patterns by means of sound tapes. Each direction has a different frequency of an electronic sine wave assigned to it. It makes up a layer of tones divided into five sections starting very high, about 10,000 cycles per second, down to about 70 cycles. The speed information is in terms of beats or pulses going from slow to fast. So the sound space is divided up horizontally which makes it equivalent, and synchronous to the eye space in some ways, but in others it's a foil to it. Anyway, this layered but simple sound space is the sound track. (Snow 1971: 47)[16]

Sound (ear) and vision (eye) spaces were designed to operate in tandem, a relationship that was maintained even though the idea of a remote audio-based control of camera movements had been dropped by the time that film was shot. Although ambiguously linked to the film's visual events, the final simulated sound track added a level of conceptual complexity to the film's viewing experience. Locke, for example, had noted its fictional powers of evocation

when he observed that "The tones did function as signals controlling the camera movements." But they could also "be taken as a metaphor for a monologue by Snow directed at the camera operator. In this sense the tones have the position of a director giving instructions from off-camera" (Locke 1973b: 67).[17] As Locke pointed out, the sound track functioned as a *symbolic* conduit for control and command instructions. This conduit replaced Abbeloos' original tape-based electronic communication system. However, there was also the issue of Snow's improvised camera movements, and the selective mutations that they introduced into the camera activating machine's communication and command system. They interfered with the film's "ideal" machine logic and bore witness to the negation of a claim, such as Locke's, that *La Région Centrale* was a pure product of automation. Improvisation *spliced* the human agent and its authorial function back into the semiautomatic machine system on location and also in the editing room.

The sound track dialogued ambiguously with the film's visual rhythm (the pattern and speed of the camera movements), primarily because of its abstract electronic character. It was a form of ambiguity that appealed to Locke, who commented:

> As you watch *La Région Centrale* you actually hear a series of varying electronic tones. These are the signals that were used for remotely controlling the camera's movements, and this ontological relation between what you hear and what you see is the major source of the complication and interest of the sound track. The tones can be appreciated simply for the quality of their sound and their rhythmical relation to the moving images, and also as a unique way of emphasizing some problematic aspects of film sound tracks . . .
>
> The sounds are as difficult to categorize as the images. The images don't look like ones you have seen until you notice the camera movements I have called space pans, and they don't function narratively as do the images in most feature-length films. Similarly the electronic tones don't sound like other films' sound tracks, and they don't function unambiguously as noises, music, or dialogues as other films' sounds do. If the sounds are taken to be noises, then during the initial viewing of the first 30-minute section, they seem to be independent of the images. The camera makes smooth circular movements outward and upward as the two tones alternate with no relation to the image that is obvious to someone who doesn't already know about their function. At this point the sounds are most easily understood as noises added just to provide contrapuntal sound. However, they could be the sound of something else that is happening, but not

> seen on the screen, so the viewer might attempt to fit them into one of the other categories of film noises. (Locke 1973b: 66–7)

The sound track's electronic tones "begin as contrapuntal sound, make a transition to sounds correlated with the images, and become contrapuntal again at the end where the camera speed is so great that their perceptual relation with the images is destroyed." By the film's end, "the sounds approach being a constant drone" (Locke 1973b: 67).[18]

Locke pursued the idea that the tones could have a control function and that Snow could have used them "to communicate with the machine operating the camera.. . ." However, instead of direct communication, he suggested that they could, as already noted, be "taken as a metaphor for a monologue by Snow directed at the camera operator." This allowed him to compare the sound track's logic with Godard's sound tracks of the late-1960s/early 1970s:

> In this sense the tones have the position of a director giving instructions from off-camera. This makes the sounds function as in some Godard film, except that Godard has not done more than ask questions or give narration off-camera.

Then he speculated, "The sounds are the director's audible presence in the film in the way that the footprints are his visible presence" (1973b: 67).

With this statement, Locke attributed an anthropomorphic/indexical presence to the sounds as opposed to describing the sounds as being *equivalent* or *analogous* to Snow's *voice* communicating the commands. He intimated, in other words, that the sounds are endowed with a degree of authorial "autonomy." Their *position* and their *imprint* on the film (as measured by their hypothetical control and command function) seemed to point to an autonomous presence and to the model upon which this presence was based. These subtle distinctions and allusions between Snow's directorial presence *behind* the camera/mechanism's movements and the sounds' functions *within* the film were further complicated by Locke when he finally admitted that "The tones heard with the film were not recorded on the Canadian mountain-top; they are studio reproductions of what those tones sounded like."

> As a result, the tones are put into the ontological position of dubbed dialogue in a narrative film. It is as if *La Région Centrale* can only be made to approach being metaphorically like ordinary films; it is so categorically ambiguous that even metaphors don't work well on it. At one level of metaphorical explanation, the sound is a spoken monologue from off-camera controlling what we see. It

> is ontologically like our hearing a director telling an actress to look in a certain direction; the director speaks and we see the result. The postsynchronization subtly changes this because the sounds are artificially related to the images instead of being causally connected to them. And it changes it because the postsynchonization is not perfect; the careful viewer can perceive that the sound and image are artificially related . . . Because the sound is a studio recreation, the possibility of more complexity in the sound track is introduced. (1973b: 67)

Having noted this "positive" anomaly and the additional complexity it introduced into the viewing experience, Locke argued that *La Région Centrale*'s sound/image relationship and its relationship with the film's metaphoric and ontological logics began to subtly disarticulate midway through the film to finally completely breakdown by its end when the camera movements accelerate to the point of destroying any clear correspondence between sound and image (1973b: 68). This allowed him to explore the play between realism and abstraction that also seemed to take place within the image frame and between sound and image throughout the film—a play that shifted register in each of the film's three major sections: (1) noise (but clearly articulated tone pulses + recognizable camera movements and camera activating machine's shadow); (2) a correlation between sound (tone pulses) and image but in the context of previously unseen camera movements; (3) an increasingly abstract visual experience coupled with drone-like noise. With this analysis, Locke had also inadvertently mapped the sound track's tripartite rite of passage logic, with the first and last sections serving as separation/reincorporation rites and the central section serving as a liminal inter-media-based communications site of aural cosmic reeducation. Whereas the first and last sections operated in a noise/contrapuntal mode, the central section was structured in a more "harmonious" way (in the sense that there was the pretense of sound/image correlation).

Another interpretation of the sound/image relationship might suggest that the electronic tones mimicked a machine-based earth to satellite communications language. This electronic form of voice-over implied that control and command information was being transmitted about the film's scripted "extraterrestrial" camera movements. Since Snow's original intention was to use the camera activating machine's actual magnetic control tapes as *La Région Centrale*'s sound track, the relationship between the two would also function as a command and control feedback loop. In spite of having been artificially recreated, the tones appeared to inject a degree of "intelligence"—the rhythmic pulses of a scripted, controlling mind at work—into the camera movements. The tones pointed back

to a distant location and an authorial presence that doubled in its absence for the camera activating machine's visual absence in the film. Since the sound track was post-produced, the "original" in-the-field relationship between Snow and the camera activating machine was subtly fictionalized. The final sound track therefore functioned both as intended—it transmitted "information" about a control and command source—and it also cultivated science fiction allusions. Post-synchronization injected a degree of ambiguity into a predetermined semiautomatic relationship between script and camera movements. This ambiguity was increased inasmuch as Snow improvised some of the camera movements on location. Although invisible to the viewer (one cannot necessarily detect the differences between them and scripted camera movements), they were important "digressions" because they represented, as Snow suggested, the desire and capacity to learn; and therefore to partake of—to immerse oneself in (to be acculturated by) the machine system and its "culture" (its *modus operandi* and, ultimately, its system of beliefs).

It might be hard to avoid the feeling that the sound track's science fiction allusions were grounded in the recent history of space travel since the tones evoked the sound emitted by a Sputnik-like artificial satellite as well as the "Quindar tones" that NASA was using at the time to activate and dis-activate remote transmitters at tracking stations during communication with Mercury and Apollo spacecraft.[19] The existence of a metaphoric acoustic dimension, with allusions to recent past and on-going space exploration activities, would have underscored the film's "cosmic ambitions" and reinforced its antigravitational effects by grounding them in actual historical events. Since they too were subject to widespread dissemination, in the form of newsworthy events transmitted by way of the mass media of the time (television and radio), methods of specialized and mass communication were also intimately bound up with *La Région Centrale*'s sound track culture.

Finally, the sound track also duplicated the original role and function of Snow's remote control panel by "forwarding" its messages to the viewer, like a communications relay, thereby creating the illusion that the visual and aural dimensions of the film were more or less "in sync" and therefore in intermittent communication with each other. However, this illusion was destroyed in *La Région Centrale*'s last section when the camera movement's speed disrupted the command and control functions of the tone signals and, in a sense, liberated the visual information from any direct connection with the previous set of allusions, and therefore with "earth." This violent "dislocation" reinforced the

antigravitational thrust of the film and provided a passageway to a secular form of cosmic freedom. When considered in terms of a rites of passage model, these apparently contradictory sound/image tendencies find their appropriate places and functions within a process that was designed to deconstruct and reconstruct sociocultural information and identities through transformative symbolic and material procedures. This brings us back to *La Région Centrale*'s basic rite of passage function.

The interest in reading early analyses of *La Région Centrale* through the lens of a rite of passage model is twofold. One can analyze Snow's film from the viewpoint of a major sociocultural ritual; and it creates important correspondences with *The Man with a Movie Camera.* Locke pointed to the "ontological relation" that might exist "between what you hear and what you see," and that it might be a "major source of the complication and interest of the sound track" (1973b: 66). Although Vertov's film was silent (notwithstanding the existence of notes concerning a sound track), *The Man with a Movie Camera* did explore an ontological relation that was similar to the one that Locke detected in *La Région Centrale* through its own system of analogies, which also included sequences of human and mechanical activity that were clearly devoted to the production of noise (machines), music (orchestras and individual musicians), and radio transmission (Figure 4.4).[20]

In his two articles, Locke defended his claims concerning *La Région Centrale*'s radical status and its peculiar extra-historical position (of being radically different from previous films). However, he also claimed that the film could be used as a basic reference to discuss the technical and ontological achievements of earlier films.[21] For Locke, the film's radicalism could be conveniently summarized, as we have already noted, by the fact that it was the "first autonomous camera film" (1973b: 72). However, this claim was overdetermined and contradictory not

Figure 4.4 *The Man with a Movie Camera*. Single frame sequence illustrating Vertov's use of visual analogies to evoke sound, in this case the reception of news and other information via the radio.

only because the film was a hybrid product, but also because Locke positioned it between classical and experimental film. Locke's own description of the film's complex visual relationship to its post-produced sound track and the resulting composite structure clearly pointed to its ambiguous relationship with clear-cut categories, including that of being the first of a new category of "autonomous camera film." However, the value of Locke's intricate analysis lay in its detailed description and its educational function. He traced the film's peculiarities to its complex relationship to inherited film categories and film language and he located their origins in the camera activating machine's spatial operations. But he also erroneously bestowed the label of originality on the basis of this machine's unique place in the history of film. This was clearly not the case, if one considers Vertov's propositions concerning mechanized camera vision or the results of a patent search conducted at Snow's request.[22]

However, if one considers Locke as an "expert" or "specialized" viewer who was engaged in a specific task to introduce and educate readers of *Artforum*, then there are a number of observations that can be made about the way that Locke chose to pursue his analysis of *La Région Centrale.* The first concerns its position within film history. It is interesting to note that Locke's historical references were limited, for the most part, to mainstream narrative films and theory as opposed to being anchored in a history of experimental film or 1960s semiological and structuralist film theory. This was a strategic pedagogical choice.

Locke's film references included D. W. Griffith, Alfred Hitchcock, Yasujirō Ozu, Raoul Walsh, and Orson Welles, while his references to a more experimental history of film were restricted to Andy Warhol and Sergei Eisenstein. His theoretical references were equally classic: André Bazin and Siegfried Kracauer. When Locke discussed painting in his first article, it was in reference to the formal work of Ellsworth Kelly as opposed to, for example, Michael Snow's own paintings which clearly explored the boundaries of the pictorial frame in ways that anticipated his exploration of the film/screen frame in *La Région Centrale,* or Frank Stella who in the late 1950s and early 1960s was exploring, in an unprecedented fashion, the relationship between the physical limits of a painting and its surface through a strict serial, minimalist geometry that was determined by the painting's shape.

However, Locke used this unusual strategy to construct a transversal analysis that bridged different traditions and histories of cinema: one that was predominantly narrative, realist, and visually transparent or "natural" in its relationship with the world, the other predominantly antinarrative, formal,

and visually self-reflexive *in its engagement with a history of its own conditions of existence*—those of a two-dimensional form of pictorial representation—a tradition and history that had developed exponentially during the course of the twentieth century. His analysis corresponded, in its trans-categorical film history logic and its overdetermined arguments, to *La Région Centrale*'s own ambiguous status in relation to different visual art and cinematic disciplines. Finally, as previously noted, Locke's analysis implicitly exposed the film's tripartite structure (a characteristic noted by other commentators but not in such a refined and emphatic way). Although he did not draw any conclusions about the structure, it does provide provisional historical and "anthropological" frames of reference for comparing *La Région Centrale* and Vertov's *The Man with a Movie Camera*.

5

La Région Centrale: From Cosmic to Posthuman Rite of Passage

Initial reactions to *La Région Centrale* suggest that it was experienced as a powerful "mind trip." In this chapter I would like to demonstrate how it functioned in this way and how it introduced viewers to the possibility of a posthuman identity by permeating each of their minds with its cybernetic conditions of existence. I will suggest, in order to achieve this condition, the film propelled each mind through a process of transformation mediated by machine vision; a process that was analogous to acquiring the necessary "escape velocity" to overcome the earth's gravitational pull, its equivalent being, in this case, an individual's habitus. *La Région Centrale* did not introduce its viewers to another sociopolitical or cultural world or model, as *The Man with a Movie Camera* did. Instead, it suspended them within an embryonic form of "outer space" (an outer space within a mind space).

La Région Centrale transported the viewer through a process that also posed the question of the limits of human experience when considered in terms of machine vision, limits that were defined, in this case, by the elements and features of a camera-based film language. It did so in much the same way that *The Man with a Movie Camera* presented its "facts" by way of the same type of language. However, whereas Vertov's film promoted (and celebrated) its transformative powers primarily through the operations of visual analogies (between human vision and different camera elements and functions—eye/lens, eyelids/shutter, etc.) and a critical comparative thematics of subject matters—, *La Région Centrale* experientially "materialized" its transformations through the geometrically variable translational process of camera activating machine/movie camera/landscape spatiotemporal relationships. How was this achieved?

La Région Centrale is divided into three major sections (or ritual phases) that encompass nine distinct subsections (Locke). Each section harbors two categories of key events. The first set of events consists of screen-sized Xs that are, however, not confined to any one section but are distributed throughout the film (there are approximately 22 individual X events distributed throughout the 5 reels that compose the film, including individual sequences that introduce each reel).[1] The three sections do not, therefore, coincide with the subsections produced by the screen-sized Xs. However, an X sequence introduces each of the film's five reels, and one reel (3) ends with another sequence that would automatically link up with the subsequent reel's introductory X sequence.[2] Although the relationship between this specific subset of X sequences and a reel's physical boundaries cannot automatically be detected by the viewer, it signals at a subliminal level a projection apparatus' limited capacity to process a 3-hour film in one continuous process. The appearance of the icon "X" operates, therefore, as a marker, a distributed visual counterpoint, reference point or interval located within *La Région Central*'s principal subject matter: the landscape.

The second category is composed of three events that serve as key symbols, initially presented in each of the film's principal sections. These events raise questions about the status of the pictorial image: whether or not it has taken place in the real world or is simply the artifact of an abstract film language. The first section contains a short sequence that introduces the camera activating machine's shadow. The significance of this event can be recognized if one has prior knowledge of the existence of the machine and its role in producing the film. The second section contains an ambiguous white disc/moon sequence (Figure 5.1). This event operates on the boundary between realism and abstraction, three- and two-dimensional space. The third section is composed of accelerated camera movements that lead to a breakdown in the relationship between image/sound track which terminates in the film's final frames that appear to be composed of white light, followed by a brief flashing (x9) sequence of large white discs. Here again, the final frames of the film operate on the boundary between realism and abstraction, three- and two-dimensional space (Figure 5.2). These discs recall the disc/moon sequence and, in particular, the brief appearance of a similar disc during that sequence, as well as the earlier manifestation, in the final reel's conclusion, of a similar form in the shape of a subliminal flare. Each section is therefore organized around what can be understood as a key symbol: Camera activating machine's shadow, disc/moon, frame of white flashing discs of light. The meaning of these symbols is open to interpretation because of

first idea - movement

very slow circular horizontal

faster gradually changing to zig zag wide zig zag

slowing enough to identify then accelerating to

close zig zag UP + DOWN FIRST OR updown, snapover

very fast changing to vertical circular pan

slowing down to very slow becoming rubber pendulum free swing

changing to free spin changing to drop changing to sprung

to medium circular pan to slow circular pan plus slow zooms

slight acceleration but not too fast, during a zoom change to vertical

circular pan plus zoom slowing down to end with ground closeup.

NIGHT: gradually "closing" saucer

movement starting at horizon horizontal

gradual rise

gradual increase in speed

to smear-dot stars, moon

start with back and forth arcs at horizon

maybe lower, short arcs gradually increasing

in span until complete circle

is made and continues yes these

could start pointing at ground, gradually

rise.

When "saucer" is closed

Back and forth pans could start plus

rotation here

previous use? saucer starting from vertical circular gradually tip

in with horizon at center? circle, spin, faster, faster to almost

a point then back out again to shift to horizontal circle.

horizon

Figure 5.1 First idea–movement. Ideas for the beginning and the night portions of the film.

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

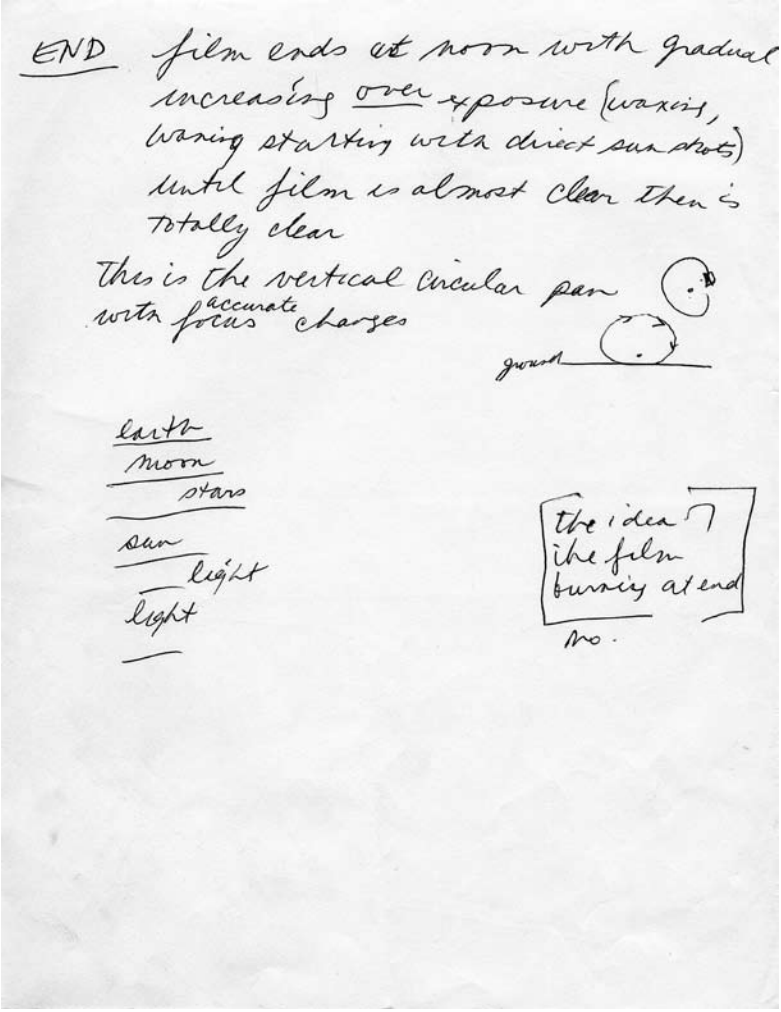

Figure 5.2 Ideas to end the film. Note the movement from earth moon, stars sun, to light, light (overexposure) and the idea of the film burning at the end.

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

their ambiguous forms and references. Each section is also organized within an overarching day-night-day cycle which seems to have served as an armature for the organization of camera movements (see Figures 5.2 a, b, c, d).

Snow has suggested that the Xs function as places of repose: a "'stop/don't-move' 'sign'" to periodically fix the frame in a 3-hour long voyage.[3] According to Snow, the Xs also divide "the film into chapters, but not consistently." In this

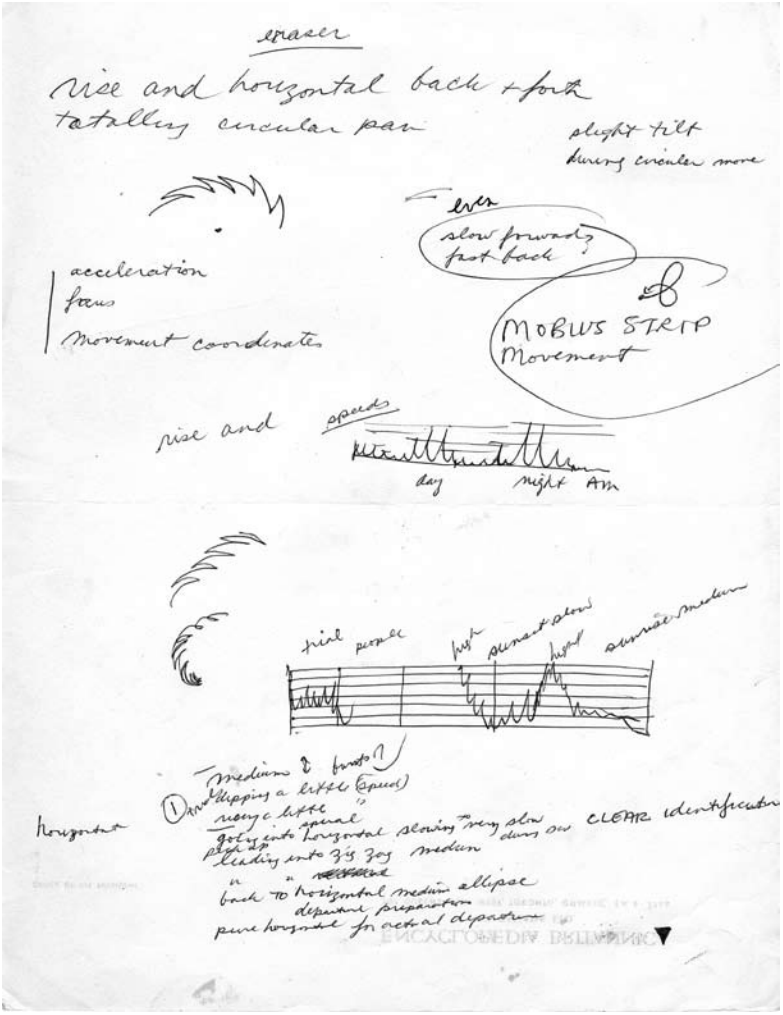

Figure 5.2a Sketches exploring overviews of basic camera movements and speed logic throughout the film.

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

mode they provide a set of visual stepping stones for the eye to find its way through the visual permutations that take place throughout its three sections.[4] As I have pointed out, these graphic *punctuations* also introduce a degree of flexibility (and human agency) into the film that complements (and complicates) its scripted-mechanical experience. In a sense, in addition to their structural identity, the Xs function as a perambulating symbol for the film's improvised

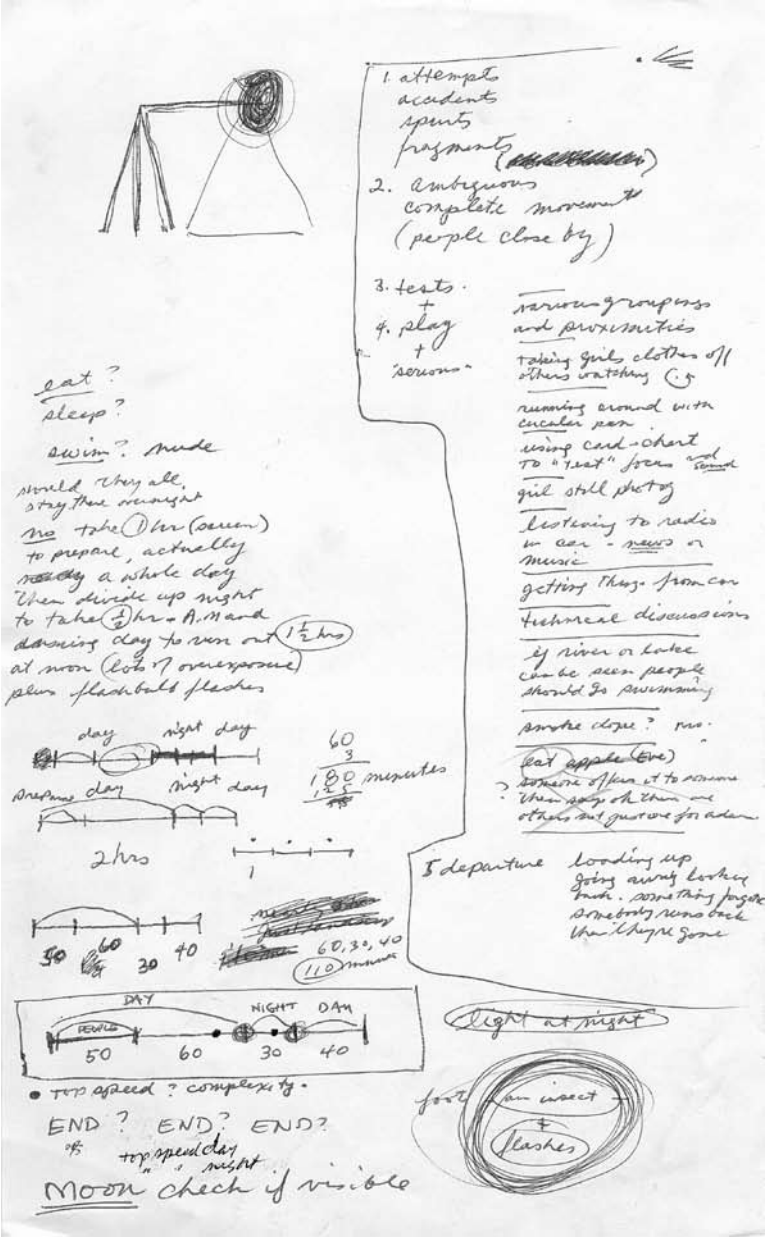

Figure 5.2b A sheet of narrative ideas that were discarded. However, the sheet contains five small diagrams related to *La Région Centrale*'s overall day/night/day structure, two of which have references to "top speed."

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

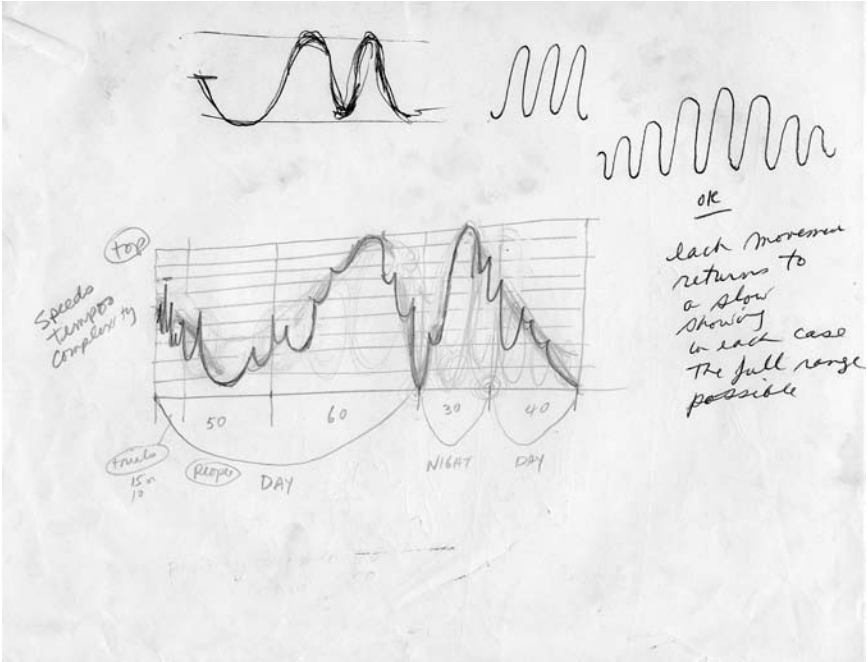

Figure 5.2c Movement/speed/tempo/complexity "graph" structured according to a day/night/day logic.

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

dimension and they represent, in this mode of operation, what Snow has described as "the possibilities of learning while shooting."[5] Most importantly, however, they function as physical markers of place, of a location: the film's *central region* which harbors the magical filmmaking machine and its visual possibilities as displayed by the film. Because they center the eye on the film frame/screen's center, they periodically remind the viewer of the existence of that *invisible* central region. They also provide a measure of its boundaries while suggesting that these Xs—these graphic marks and signs—actually keep the frame/screen *in form*, in good shape and therefore structurally stable during the film's exploration of the visual limits of a machine/landscape relationship (and the possible nature of posthuman identity it promotes).

La Région Centrale's first key symbol is the camera activating machine's shadow. This shadow first appears in the film's rite of separation sequence where it points to *La Région Centrale*'s source. It marks the mysterious location of an origin myth for the film's machine-based world and its "nonhuman" method of

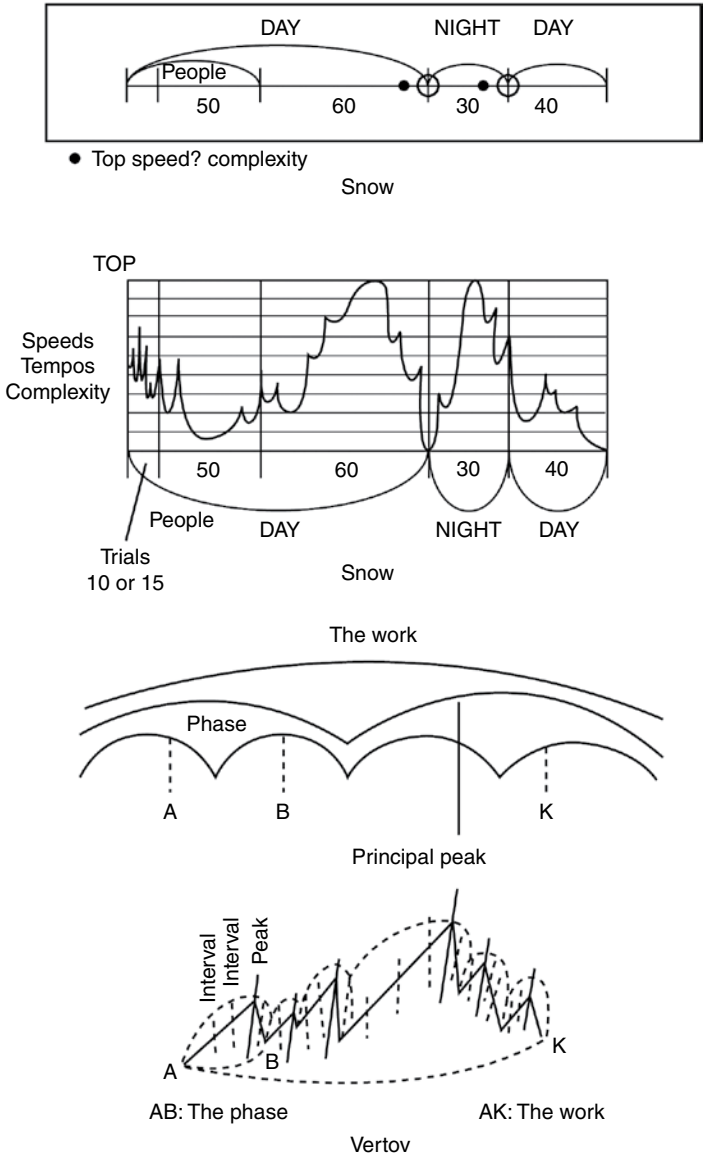

Figure 5.2d A comparison between two of Snow's sketches for *La Région Centrale*'s composition on the basis of camera movements (Figures 5.2b and 5.2c) and Vertov's schema illustrating the relationship between intervals and phases in a film object (Figure 1.11). The correspondences are striking and point to a common interest in visualizing an overall film structure as a rhythmic whole.

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

seeing and recording its environment. The shadow marks the location of this origin *off-screen*, "somewhere" nearby, in another space and time: In a desolate *non-site*, whose only equivalent seems to be an extraterrestrial location. The shadow marks the *double* absence that is at the origin of this film: the off-screen machine and a mythical non-earth location whose existence is to be constantly alluded to through the "presence" of discs of light in the second and final sections of the film. While the machine is nowhere to be seen, its presence permeates the film since it is this apparatus that has created the film and it appears in various forms (including a sequence of 192 shadow fragments of the camera activating machine's physical presence during a 9-minute section of the film in reel 5). Hence the importance of this symbol's shadowy presence. It could not be treated in any other way. To have immediately unveiled the machine's physical form and its function would have effectively transformed the film into a poetic document of the kind that Vertov produced in the case of *The Man with a Movie Camera*. Both directors had pointed to the machines that had created their films, both had used the camera as a principal actor, each, however, in a different way. The camera activating machine's shadow is, therefore, the perfect representation of the cosmology that *La Région Centrale* promotes, which is, in turn, perfectly symbolized in the film's central or liminal section in the ambiguous perambulating shape of a luminous disc. Perhaps this disc is *La Région Centrale*'s extraterrestrial "Godhead" symbol?

The moon sequence is approximately 4 minutes long, during which time a small luminous "disc" travels at different speeds and different trajectories across the screen. Anomalies within the sequence include the single frame exposure of a large disc and a three-frame image of a disc that bifurcates in the center. The image's permutations can trigger different interpretations. The most basic one concerns its indexical/instrumental function of "drawing" the viewer's attention to the frame's limits. It can also elicit an earth-satellite allusion in order to suggest that the film's origins might reside in an extraterrestrial source, such as the moon's surface. This reference can easily lead the viewer's imagination to weave correspondences with the moon exploration and landing events of the 1960s and early 1970s. Besides this basic reference (which does not necessarily implicate knowledge of Snow's objectives in producing the film), there are many directions for the symbol to mutate in terms of relationships and meanings: camera as satellite, lens as bright white disc, rotation of camera (moon satellite) around a planet (earth), disc as sign of the sun's presence and its basic role of providing earth and moon with light (the medium for vision and the world to be

rendered visible etc.). These references suggest that the disc/moon sequence must also be linked up to the camera shadow's fragmentary appearances throughout the film with all the symbolic permutations that the relationship engenders as the two sets of meanings meet, interact, and multiply: disc as "sun" that is at the origins of the camera activating machine's shadow, light versus shadow or darkness, shadow/darkness/absence at the *La Région Centrale*'s origin versus the on-screen machinations of the on-screen disc of light. There is also the question of their "negative/positive" roles as symbols of the mythological power of the camera activating machine in its role of a new form of mechanical "Sun God" to create a nonhuman, machine-based world.

The disc/moon symbol also serves as a beacon for the film's final key symbol: the light bleached sequence of frames that terminate with a final appearance of the iconic X which is followed by a brief sequence of blinking white discs, thereby locking the three in a negative (mark of deletion)/positive (mark of location) relationship. One might also ask the question "What is at the origin of the light bleached frames and discs?"—"Sun or electric light, natural or cultural event?" If *La Région Centrale* threatens to end in a blinding statement of the sovereignty of light over darkness (in contrast to *The Man with a Movie Camera*'s light excluding closure), then this is astutely avoided through the insertion of a final X, a figure that nevertheless carries its own arsenal of allusions and connotations, including, in this final case, that of graphic (cartographic) affirmation/denial as opposed to phenomenological/perceptual (and even social, cultural, and political) closure. The X marks the real and hypothetical placeless place of the camera activating mechanism's Northern Quebec location: the abstract nature of its conceptual and historical non-site as well as its origins in a world of graphic representation—of sketches, diagrams, and programs. In other words, from Landscape (rite of separation), to Earth (liminal phase), and finally, "La Région Centrale," or the *central region* (rite of reincorporation).

It is now possible to present an outline of *La Région Centrale*'s basic tripartite ritual structure and a preliminary inventory of its constituent material and symbolic elements.

Rite of Separation

Section I

EARTH (LANDSCAPE)

Key symbol: shadow of camera activating machine.
Time: Daylight (midday onwards).
Location reference: Landscape (Northern Quebec).

30 minutes

i) *Human presence: film crew (early version of La Région Centrale, deleted from final film)*
ii) *Human voices: film crew? (early version of La Région Centrale, deleted from final film)*

Separation of the camera eye from the dictates of the human eye, Part I: The camera activating machine, its subject matter and basic language.

1) Landscape used as a means of exploring film frame properties through camera movements. Introduction to the themes, defamiliarizing tactics and strategies of antimontage (note that Locke placed *La Région Centrale* in the category of antimontage films, whereas *The Man with a Movie Camera* is a canonical example of a montage film).
   i) Introduction of the camera activating machine but only through the presence of its shadow, thereby creating a link between what is seen and unseen, film as shadow of not only the world (as representation) but also of the machines that make this representational world possible.
   ii) Presentation of the landscape through basic machine-based camera movements.
   iii) Presentation of basic camera movements to be explored in the film through a landscape subject.
   iv) Basic highlighting of the film frame as the formal and technical limit of visual analysis and operational arena of the film's machine-based language.
   v) First appearance of the graphic markers "X."
2) Sound track. Introduction to the aural elements of an acoustic language that suggests its unusual communications and command role in the film, but also in a way that suggests its ambiguous status (as noise). Contrapuntal sound/image relationship. Music/symphonic roots (Snow, Locke).

Liminal Stage

Section II

EARTH (PLANET)

Key symbol: disc (moon).
Time: Dusk/Nighttime.
Location reference: Planet Earth.

Separation of the camera eye from the dictates of the human eye, Part II: Introduction to the advanced parameters of a new language of machine vision.

1) Periodic references to the camera activating machine's shadow with an increasing focus on the machine shadows' anamorphic/anthropomorphic characteristics.
2) Landscape is increasingly presented as *the* visual context for the exploration of film frame properties through unusual and unique camera movements.
3) The clarification of the visual language, symbolic elements, and spatial parameters of a new cosmic creation myth: Special camera movements that have no known name, including antigravitational camera movements and movements produced by camera pivoting on the axis of its lens. Other unique camera movements include sweeping, zig zag, and Möbius-shaped movements.
4) The media transdisciplinarity of the camera/camera activating machine's language. Creation of an interface between the languages and preoccupations of cinema and minimalist/monochrome painting. Introduction and exploration of formal/minimalist issues from advanced 1960s painting practice (painting as object, frame as structure and subject matter, surface as unique physical presence, monochrome as method of uniting/fusing frame as rectangular boundary, surface/plane and therefore as physical presence into one undifferentiated perceptual experience). These importations suggest an expansion in painting's visual/formal language and range of operation. Inversely, they point to an expansion in film's physical parameters and references.
5) Disc/moon sequence.
6) Suggestion that machine-based experience can lead to (is synonymous with) a transcendent cosmic experience.
7) Sound track. Sound track used as a means of ensuring a cybernetic feedback-based process of unlearning and learning (or defamiliarization and refamiliarization). Apparent correlation between sound and image, but its status remains ambiguous. Allusions to music, but also to noise (the synthetic sonic properties of the camera activating machine's original control and communication's program and the sonic byproducts of the motorized operation of its elements).

Rite of Reincorporation

Section III

THE CENTRAL REGION

Key symbol: Light bleached frame sequence followed by blinking discs.
Time: Daylight (sunrise to midday).
Location reference: "Central Region."

The anti-environment and phenomenology of the camera activating machine's machine vision.

1) Accelerated speed of camera movement through space as method of violently breaching the boundaries between man-made and automated machine-based perceptual experience (acceleration in the appearance (recycling?) of the camera activating machine's fragmentary shadow, including one section with 192 brief, partial appearances or "manifestations" of the machine's shadow).
2) Reintroduction of the monochromatic screen surface under different machine vision parameters such as accelerated camera movements producing blurred images that neutralize the illusionistic tendencies of the "pictorial surface" of the frame.
3) Powerful new visual propositions that experientially map out a machine-based transcendent cosmic anti-environment in terms of the speed of separation of images from their referents: the landscape and, by extension, the earth. The consolidation of a new language based on the formal properties of the frame and its perceptual consequences when measured against an earth-bound landscape location/non-site. Compression of the film's fame space into the screen's surface with the consequent impact on the viewer's perceptual space vis-à-vis an illusionary (realistic) film space. The new film space heralds an ultimate transformation in the theater's institutional identity, as well as in the viewer's habitus insofar as they share a common sociocultural matrix.
4) Sound track. The transcendent, cosmic, anti-environmental sonic properties of the camera activating machine's control and communication's program after it has reached its hypothetical sound/image, landscape/earth "escape velocity."

    i) Contrapuntal relationship between sound and image as camera speed is accelerated to the point that conventional perceptual relationships between the two are destroyed.
    ii) New transcendent, cosmic, anti-environmental sonic state: Drone-like noise.

An intriguing parallel can be detected between *The Man with a Movie Camera*'s ritual structure, its visual/perceptual strategies, and the ones displayed by *La Région Centrale*. In both cases, there is a correspondence between a rite of separation that operates through the staging of conventional yet unusual settings (cinema or barren landscape). Each filmmaker initially adopts strategies of perceptual dislocation associated with the presentation of unusual pictorial elements (cinematic projection apparatus) or unfamiliar viewpoints and unconventional camera movements (camera mounted on automobile or locomotive vs camera rotating around its own lens axis, etc.). Both films introduce an audience to important technical information. In Vertov's case, it's the cinema and its apparatus (including the projector and projectionist, movie camera, tripod and human operator, etc.). In Snow's case, it's the camera activating machine and its basic movements. This technical information sets the stage for the liminal promotion of unconventional social knowledge (Soviet society, its urban culture and system of values, or the possibility of a new cosmic consciousness inhabiting a parallel mind-based "extraterrestrial" environment) linked to new forms of social/camera-based behavior. Both films end with accelerated image sequences that reinforce that idea of another condition of physical, material, and socio-symbolic existence. This existence is based on a different *posthuman* identity that is explored throughout each film. This other identity is associated with the disembodied machine intelligences that each film proposes as their implicit subject matter. While Vertov introduces this possibility in the *The Man with a Movie Camera*'s opening shots, Snow never really provides an equivalent analogical pictorial representative that can serve as this identity's on-screen materialization. Instead, *La Région Centrale* maps out this *possibility* through a combined process of perceptual defamiliarization, destabilization, and sensory transference. Locke's unnamable camera movements in the film's liminal phase are interesting signs of a machine-based existence and "consciousness," especially since they also point to the stage's creative/educational task of exposing the hidden or implicit cultural parameters that can serve to mark its existence as a function of its *operational* environment.

There are other significant cultural consequences that can be attributed to unprecedented liminal phase camera movements. It is interesting to note, for example, that there was only one mainstream film that attracted Gene Youngblood's attention in *Expanded Cinema*. Two chapters of Youngblood's book were devoted to Stanley Kubrick's *2001: A Space Odyssey* (1968). Although wary of its thematic and sentimental limitations, and sensitive to its adherence to

what he called a "new nostalgia" anchored in "an awareness of radical evolution in the living present," Youngblood nevertheless acknowledged the film's power to make its audience aware of their transformation "by time through living within it"—words that could also be applied to *La Région Centrale* (Youngblood 1970: 142, 143). He also noted that the new nostalgia vehiculated by Kubrick's film was symptomatic of "the death of history." He pointed out, "The more we learn about the present, about humanity's perception and interpretation of the present, the more suspect history becomes." He argued that "The present has discredited the past, while the history of the present is recorded by machines, not 'written' by men, and is thus out of our hands as a 'man-made' phenomenon" (1970: 144). At another point in the chapter, "2001: The New Nostalgia," Youngblood declared: "As we unlearn our past, we unlearn our selves," and continued, "This is the new nostalgia, not for the past because there is no past, and not for the future because there are no parameters by which to know it" (1970: 146). It was, as Snow's film suggested, a nostalgia for that process of *unlearning* ourselves and all that this implied when the human race confronted a parallel culture of machines and their unique capacities to not only see *differently* but to also conceive of the world and its inhabitants in a radically different way. Of course, by the 1960s humanity already had a long history of sharing its destiny with different models and calibers of machine-based intelligence. They included experimental, educational or imaginary literary-based machines, scientific and technical prototypes, and objects of scientific curiosity or entertainment. The human species had already shared its destiny with such fascinating objects of its imagination as delicate, esoteric eighteenth-century clockwork automata, Babbage's massive and intricate nineteenth-century mechanical calculating engine prototypes, Capek's early-twentieth-century imaginary robots, and their possibilities as explored in the dense network of science fiction novels and films of the second half of the twentieth century. By the late 1940s and early 1950s, a group of brilliant engineers and mathematicians would blur and gradually efface the boundaries between the worlds of biological organisms and machine systems through the theoretical and practical developments associated with new disciplines such as Artificial Intelligence and Cybernetics. The latter discipline would, in 1960, give its name to a posthuman prototype in the shape of the "astronaut locked up into his wee bit of wrap-around space."

According to the authors of the seminal 1960 article, "Cyborgs and Space," the neoligism *cyborg* (cybernetic organism) defined any "exogenously extended organizational complex functioning as an integrated homeostatic system

unconsciously" (Clynes and Kline 1960: 27).[6] If "Cyborg" identified the entity that emerged as a consequence of the artificial adaptation of a human organism to hostile environments like outer space (1960: 27), then it is also possible to treat *La Région Centrale* as a new type of earth-based extraterrestrial laboratory environment, with all that this environment might signify, physically, mentally, and symbolically for the film viewer "sitting within it." As Youngblood correctly intuited in his critique of 2001's use of synthetic planetary images, "We've confronted a larger reality: there no longer is a need to represent cosmic consciousness through fiction" (1970: 139).

La Région Centrale is, of course, in theory if not altogether in practice, the quintessential product of a "present recorded by machines," and the environment it recorded was chosen precisely because of its bleak uninhabited, moon-like characteristics. When considered in relation to Youngblood's discussion of Kubrick's 1968 science fiction *magnum opus* one begins to recognize some of its salient science fiction characteristics; and, as R. Buckminster Fuller pointed out in his introduction to *Expanded Cinema*, "All good science fiction develops realistically that which scientific data suggests to be imminent" (Fuller 1970: 15). One must not forget the impact that six Apollo moon landing missions (Apollo 11–17) had on the popular imagination between 1969 and 1972; nor that they served as a backdrop and cultural reference for *La Région Centrale*'s conceptualization, as Snow himself noted at the time. Most importantly, they also served as a backdrop for the film's *reception*.[7] *La Région Centrale* could therefore easily be interpreted as a sophisticated science fiction metaphor for space travel, extraterrestrial or cosmic contact, but one that operated at a more visceral and phenomenological level of experience than *2001: A Space Odyssey*. Snow's film also proposed a very different kind of simulation/experience of intergalactic space and the earth's relationship to other moving planets and stars.

Fuller had pointed out that "Because all the stars in the Universe are in motion, our planet orbits rotatingly in an ever-changing, omni-circus of celestial events." He continued: "There is no static geometry of omni-interrelationship of Universe events. Some of the stars you are looking at have not been there for a million years—Some no longer exist" (Fuller 1970: 19–20). Perhaps the key to *La Région Centrale*'s basic cultural logic can be found in Fuller's insights, especially when framed by another: "Without the infinitely-extended lateral plane, the words up and down are meaningless" (1970: 20). Such statements succinctly captured the experimental spirit of a counterculture whose adherents not only challenged existing patterns of thought but were also determined to seek out

new and unforeseen points of view on the nature/culture relationship and the possibilities that were suggested for pursuing alternative configurations of social existence that took account of the earth's place in the Universe. Certainly, Fuller's "omni-interrelational" cosmic perspective is echoed in the Snow/Abbeloos camera activating machine's omnidirectional rotational logic.

Vertov's animated tripod-based camera is also a product of "lateral plane logic." However, there is a basic difference between the Vertovian animated anthropomorphized camera system and Snow's camera activating machine. Vertov's animation functions like a human being that is confined to moving along the earth's surface. In contrast, Snow's camera activating machine functions as a remote controlled tripod head which has been planted into the ground, although the interrelational/omnidirectional logic of its articulated "robot arms" and its "ideal," dislocated, programmed "brain," ensured that it functioned in a post-robotic-humanoid manner. This is the basic "anthropological" logic that determined the production of raw date for *La Région Centrale*'s post-earth bound, antigravitational cosmic vision: An omnidirectional eye that was capable of scanning a landscape from a basic reference point that was calculated in relation to the human body and yet appeared to float free in space.

If Vertov's animation pointed to the movie camera's eventual autonomy, then Snow's machine was designed specifically to deny its imminent anthropological and humanoid references in order to produce an off-site extraterrestrial cosmic experience, even though Snow's film was peppered with the fragmentary shadows of its machine origins.

If *La Région Centrale* was still in many ways a product of a traditional "infinitely extended lateral plane" or "up-and-down make-believe flat world" view of humanity's place on earth, it nevertheless interfaced with and collected data from the Universe on the basis of a Fullerian-like "*worldaround*" scientifically based model.[8] Snow's film is also a visual record (part document/part reconstruction) of a "worldaround" type of interface (camera activating machine/movie camera/film frame/lens/landscape) as it played itself out in real time (camera movements through space) according to an "omni-interrelational" geometric logic that had been scripted in an "old-fashioned" two-dimensional, handwritten and improvised, scenario (see Figures 5.3, 5.4).

Snow's scenario and his improvisations place *La Région Centrale* in the lineage of Vertov's poetic documentary practice which was also in harmony with Fuller's educational goal of the "discarding of yesterday's inadequate amusements, shallow romances and drama, and make-believe substitute worlds to cover

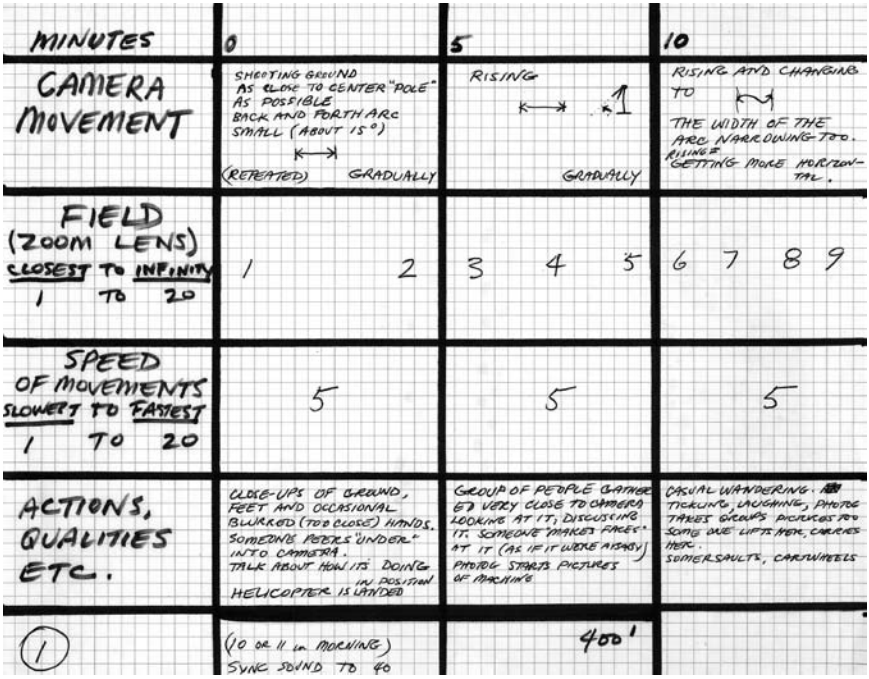

Figure 5.3 Beginning of Snow's shooting script. Compare to an example of a Vertov montage phase breakdown from part four of *The Man with a Movie Camera* reproduced in Tode et al. (2006: 185–8). It is unclear in Vertov's case if the breakdown preceded shooting or was produced subsequently. The correspondence in the formal methods is interesting.

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

up the inadequacies of misinformed and underinformed, physically slavish or bureaucratically dogmatic, thoughtless life" (Fuller 1970: 33). However, its sociopolitical goal was different.

The Man with a Movie Camera's social rite of passage objectives were clear. *La Région Centrale*'s were, in comparison, more obscure, until one applies Fuller's conception of a scientifically correct "worldaround" vision of humanity's place in the Universe and transposes that conception to a specific location in Northern Quebec. In parallel with, or as an extension of Vertov's omnidirectional, multisensory colonization of the human inhabitants of earth in the name of a new socialist consciousness, *La Région Centrale* proposes a "worldaround" mode of seeing and experiencing the world. But the political and social parameters of this vision are quite different from the one's Vertov proposed in *The Man with*

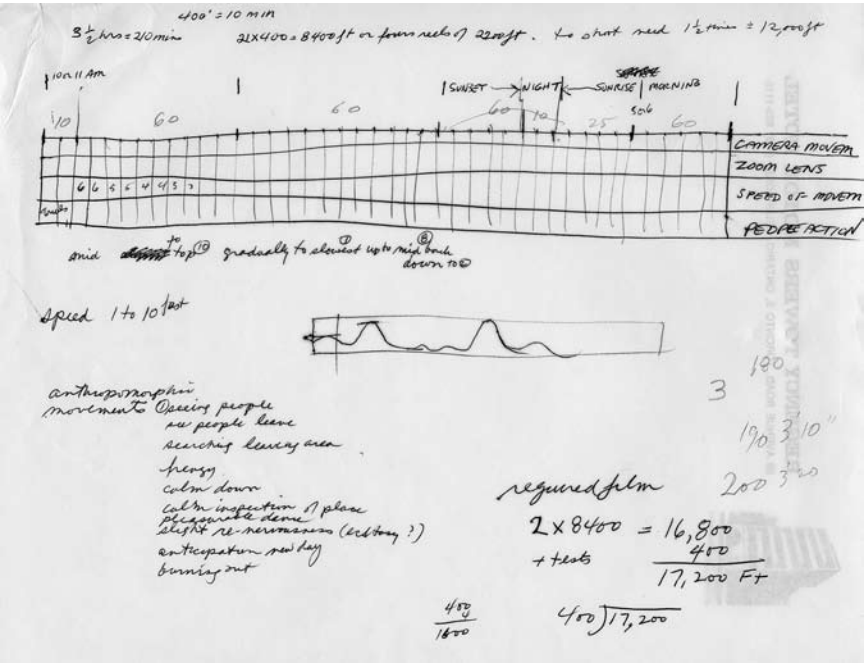

Figure 5.4 Gridded overview of the whole film.

Source: MSF-TLA, 10–7, "Shooting [La Région Centrale]" 1970. © Michael Snow. Courtesy of the Art Gallery of Ontario.

a Movie Camera. Youngblood summed up the utopian, transnational politics of a "worldaround" mode of visualizing the world in the last paragraph of *Expanded Cinema*:

> The limits of our language mean the limits of our world. A new meaning is equivalent to a new word. A new word is the beginning of a new language. A new language is the seed of a new world. We are making a new world by making new language. We make new language to express our inarticulate conscious. Our intuitions have flown beyond the limits of our language. The poet purifies the language in order to merge sense and symbol. We are a generation of poets. We've abandoned the official world for the real world. Technology has liberated us from the need of officialdom. Unlike our fathers we trust our senses as a standard for knowing how to act. There is only one real world: that of the individual. There are as many different worlds as there are men. Only through technology is the individual free enough to know himself and thus to know his own reality. The process of art is the process of learning how to think. When man is free from the needs of marginal survival, he will remember what he was thinking before

> he had to prove his right to live. Ramakrishna said that given a choice between going to heaven or hearing a lecture on heaven, people would choose the lecture. That is no longer true. Through the art and technology of expanded cinema we shall create heaven right here on earth. (Youngblood 1970: 419)

This Fullerian-McLuhaneque influenced paragraph could serve as an uncompromisingly *realist* manifesto for a 1960s generation of countercultural artists. For the model suggested is that of a laterally extended, yet individually defined and centered earth where each of its human inhabitants adhered to a secular, body-centered "worldaround" view of their cosmic place in the Universe. It is worth reiterating that it was Youngblood who had written to Snow about *La Région Centrale*'s effect of placing the individual viewer—in this case Youngblood—at the center of the Universe, and it was Youngblood who also said that this was the case with everyone else in the theater. In contrast to Vertov's desire to gear the individual to a collective political will, Youngblood's individually based, liberally defined communalism and Fuller's metaphysical mind with its possibilities of telepathic communication voyaging on a spaceship earth according to a Scenario-Universe were perfectly in tune with *La Région Centrale*'s immersive cosmic logic (and *vice versa*). As P. Adams Sitney noted, in relation to Snow's film, in his survey of American avant-garde film practices: "The whole visible scene, the hemisphere of the sky and the ground extending from the camera mount (whose shadow is visible) to the horizon, becomes the inner circumference of a sphere whose center is the other central region: the camera and the space of its self" (Sitney 1979: 383–4).

Snow's film offered the viewer the possibility of identifying and communing with a machine-based act of creation, in fact, another, more radical myth of origins. Not with the universe as previously understood, with its Judeo-Christian God figure, or a pantheon of hedonistic and quixotic gods, but with a new kind of Universal Consciousness. Alan Watts described this type of consciousness as ". . . a new sense of the individual, that we all become conscious of ourselves as organism-environmental fields, vividly aware of the fact that when we move, it is not simply my self moving inside my skin, exercising energy upon my limbs, but also that in some marvelous way the physical continuum in which I move is also moving me" (Watts 1965: 56). This description can be considered to be the result of a translation of a 1960s antiauthoritarian countercultural consciousness by way of a Wienerian intersystemic cybernetic communication model. Insofar as an "organism-environmental field" could be treated as a new stage in an individual's understanding of how its consciousness could take its

rightful place *in* the world, *La Région Centrale* can also be understood in similar terms: to function as a rite of passage for an individual viewer's socialization to a "worldaround"—"organism-environmental field"—mode of existence.

Fuller described the ultimate objectives of this process of socialization in words that updated Vertov's utopian program by stripping it of its early-twentieth-century revolutionary socialist content: "In due course, we will realize a one world human integrity and with each degree of physical integration a new degree of metaphysical freedom will be attained" (1970: 22). Moreover, it was Fuller, the inventor of that quintessential piece of hemispherical architecture, the geodesic dome, who would accidentally provide the best description of the social functions of Snow's film when placed in the specific environment of a film theater: The fact that it too could for a few hours "emit" viewers "into a greater, more inclusively exquisite spherical environment of automated mechanical controls that progressively decontrol humanity's thought and action capabilities—ever increasing humanity's options—emancipating it from its former almost total preoccupation with absolute survival factors" (1970: 23). Finally, it was also Fuller who would provide a cogent metaphor that could be applied to the *La Région Centrale*'s spherical, womb-like (post-*2001: A Space Odyssey*) experience when he introduced the idea of a "Scenario-Universe" that would emerge from "the womb of new-dawning awareness" (1970: 34). And as Fuller also intuited, it would take a new autonomous kind of "infinite apprehending and comprehending" metaphysically educated consciousness to exist in a spherical posthuman cosmically defined, ecologically organized collective Mind space—the kind of Mind space that *Expanded Cinema* was actually mapping in relation to the visual and experimental arts of the late 1960s, early 1970s (1970: 23, 35).[9]

If *La Région Centrale* functioned as a passageway from a culture based on an "infinitely extended lateral plane," "up-and-down make-believe flat world" to one based on a "worldaround" mode of existence, then its rite of passage functions were perfectly in line with its content. Far from being a utopian product, it was a creation of a calculated "experiment" involving the construction of a specific consciousness expanding device whose cultural logic was in harmony with the most advanced 1960s models of how the individual mind was integrated into a global collective consciousness. Thus, Sitney would describe *La Région Centrale*'s final section in the following evocative terms:

> The camera circles so quickly that the motion is no longer read as camera movement and the landscape itself seems to fly. As speed accelerates, the earth

> it photographs forms a spinning ball and the last image of the film defines the central region as a planet in space, recalling the same metaphor for consciousness in most of [Jordon] Belson's work. (Sitney 1979: 385)[10]

However, he had already pointed out that, in contrast to Belson, ". . . Snow's transcendentalism is always grounded in a dialogue between illusion and its unveiling" (1979: 385, see also Snow 1982–3: 41). This declaration reinforced the observations of early commentators on Snow's film while also concisely articulating *La Région Centrale*'s basic dynamic ritual functions: To disarticulate and liberate the mechanisms and language of illusion in order to open the way for the generation of a new perceptual and epistemological experience based on the cybernetic ideology of a new mind expanding, Mind integrating scientifically and cosmically attuned (counter)culture.

Like *The Man with a Movie Camera*, Snow's film can also be understood to be a unique experiment, but one that was intimately related, as Youngblood's inventory of expanded cinema suggests, to a general 1960s counterculture and, through it, to an educational strategy of transforming social behavior through the medium of a multisensory revolution.[11] Snow's 1971 claims that *La Région Centrale* was an antigravitational, extraterrestrial "cosmic strip" reveal a close affiliation with this sensory revolution (Snow 1971: 47). In the same 1971 interview, Snow would announce, in words that seemed to echo a culture-wide desire for change, that "*La Région* isn't only a documentary photographing of a particular place at various times of day but is equally and more importantly a source of sensations, an ordering, an arranging of eye movements and of inner ear movements."[12] *La Région Centrale*'s promotion of change through a radical (posthuman) shift in perspective was also suggested by Snow when he stated, "It starts out *here*, respecting the gravity of our situation but it more and more sees as a planet does" (1971: 47).[13] This desire for change and its pursuit through visual strategies allied to the radical re*educational* functions of new sensory experiences would find a perfect McLuhanesque representative in the artist as "the man of integral awareness" and a concrete embodiment in his concept of the "anti-environment" whose primary function was to train "perception and judgment"—both of which could be applied to other new media artists of Snow's generation, from Nam June Paik to Les Levine, and their more ambitious artworks (1964: 71, ix). The development and proliferation of the "populist" and "democratic" *happening* throughout the 1960s would also find a media-based aesthetic-political parallel in expanded cinema.

Another early viewpoint that sheds additional light on *La Région Centrale*'s pedagogical undertones and its rite of passage functions, was adopted by Locke in his two *Artforum* articles. The "framing" of these articles was educational, as was their function, in the sense that Locke's descriptions of Snow's film were geared to clarifying its unique features for readers who would then be able to see and "experience" it with an "informed eye." While this was no doubt true of other commentators' objectives in writing their articles and books, the fact that Locke enthusiastically embraced this task and *structured* his discussion in its terms, casts a different light on the film and its rite of passage function. As Locke pointed out in the conclusion to his December 1973 article:

> I have been writing about "how you should watch" the film meaning both that you should go to see it and that you should use your eyes and ears in certain ways after you get there. If I thought you had unlimited time and a willingness to do exactly as I told you, I would have directed you to see *La Région Centrale* before you had read this far. Ideally you would first see the film uninfluenced by criticism and then see it again after reading about it. Since I accept the limitations of your time and my influence, I have written this to be read before viewing the film. (1973b: 72)

One of Locke's tasks, as set out in his two articles, was to introduce the *uninitiated*, yet informed *Artforum* reader to *La Région Centrale*'s transformative process and the new vision of the world that it embodied and promoted. Locke's analysis of the film could equip viewers with the intellectual and historical tools to appreciate the unique experience they were subject to in viewing Snow's film.

By doing so, he was also providing them with a new set of cinematic tools that could be used in a like-minded quest for cosmic communion. By providing names and descriptions for the "nameless" camera movements in *La Région Centrale* and a complex yet clearly presented analysis that covered all aspects of the film's multisensory experience, Locke also exposed the specific objective of his educational ambition, namely to *transform* a reader into an informed viewer. Thus his articles inadvertently served as introductions to the film's rite of passage process and experience. In retrospect, it is possible to suggest that for Locke's readers, *La Région Centrale*'s rite of passage process began with Locke's article since they were conceived to function as a mini process of transformation from *reader* to potential *viewer*. Locke's analysis reminds us of how *La Région Centrale* could also generate knowledge (unnamed camera movements, links to mainstream film in the case of space pans, etc.) about its novel culture,

parameters, limits, and possibilities. In this sense, the film functioned as a hub for the importation and redirection of theory while simultaneously serving as a generator of new disciplinary information and historical relationships etc.[14]

Finally, there remains the question of *La Région Centrale*'s relationship to a posthuman identity. How did the film articulate the question of machine vision and posthuman identity? The question was answered, again indirectly, by another writer, Thierry de Duve, in an article published in 1995 in which the author set out to explore the deictics of experience in Snow's work. De Duve claimed that *La Région Centrale* was a "masterpiece" in the sequence of works that Snow had produced as the result of his visual "inquiries into the conditions of experience" (de Duve 1995: 33). De Duve considered the film to be a masterpiece because of its singular equation of unity with experience. However, the question of unity was of a *different order of experience* since de Duve demonstrated that "Snow's departure point had been to accept as a given that the unity of experience was shattered" and that the artist "had furthered the fragmentation by setting the conditions of experience free of their intrinsic solidarity with each other" (de Duve 1995: 33). De Duve proceeded to explore the deictic relationships that underscored *La Région Centrale*'s "unity" when their affiliations were no longer aligned so as to produce a Kantian subject, but, on the contrary, heterogeneously and paradoxically suspended in the manner of intact ingredients in a "cooked meal" (de Duve 1995: 34). I will suggest that the trail of de Duve's argument leads to the *structural* identity of the posthuman subject in Snow's film.

De Duve began his analysis by pointing out that commentators had argued that *La Région Centrale* was "a transcendental movie" and that it conjured up "the spectre of the subject"—and specifically a Kantian transcendental subject. However, de Duve pointed out that while Snow did, indeed, address "transcendentals in the Kantian sense" in his film, he managed to do so "without the subject in the Kantian sense." In a Kantian world, space and time, the "here and the now" had been placed "inside the I" where space functioned "as the form of external sensibility, time as the form of internal sensibility" (34). Later developments, spearheaded in particular by science and philosophy, displaced these sensibilities from the "I" to matter where they "gained their autonomy from the subject." Thus, in de Duve's words, "The I (the eye) . . . is no longer the Cartesian subject of certitude to which the here and now are referred, or the Kantian subject of transcendental aesthetics by which they are synthesized into

the unity of an experience." They had in fact been converted into deictic markers through, in particular, philosophy's "linguistic turn."

> If, instead of assuming that the pronoun *I* automatically means the subject in the Cartesian-Kantian sense, we simply take it to designate the subject in the grammatical sense, the subject of a sentence, then its claim on synthesis is gone. It is simply a deictic, a pointer, alongside the other pronouns, and on equal footing. . . . In conjunction with the pointers *here* and *now*, it simply states the conditions which make experience possible; it doesn't guarantee it. (34, emphases in the original)

Having set out the frame of reference for his discussion of *La Région Centrale*'s unique capacity to present a unity of experience based on a separation of its deictic ingredients, de Duve proceeded to demonstrate how it managed to achieve its powerful and exclusive transcendental result.

He began with the statement that "With *La Région Centrale*, Michael Snow has set the conditions for an experience, an aesthetic one, no doubt, one that may not have to do with the sublime to be sought in 'crude nature,' but not one that is *his*" (emphasis in the original). This was the decisive point. Instead of being the mediator of an experience, "He has set the conditions of experience, but has stopped short of achieving its synthesis."

> The mobile pointer *I* is set free, that is, rendered mobile again: I, who write these lines, can have the same experience as Michael Snow or as anyone looking at the film.. . . It is his masterpiece and yet, again, what the film conveys is not his experience. It is nobody's experience until it exists as projected light on a screen. And even then, the film astonishingly retains the quality of preparatory work. For three hours in a row, we are watching the conditions of experience being set, installed, tested, probed, laid down before our eyes, and only when the projection is over do we realize that we went through something of which we may say: that was quite an experience.

Moreover, that experience was common to the artist and viewer in the sense that "The artist's experience of the central region was only slightly different from ours, to the effect that he saw the rushes and edited the film" (34). As Snow pointed out in his own October 1972 assessment of his experience:

> La Region Centrale in its entirety has been visited by me now 17 times; 17 times by me now has in its entirety La Region Centrale been visited. I knew some

> of what was there but certain areas have been clarified by repeated experience. These are the nature and qualities of the sensations and states of mind and body produced in me by the images, sounds and their durations. Driftings, fallings, risings, sinkings, floatings; I believe that other people have felt similar sensations. They've told me. (MSF-TLA, 10–4, "Structural Cinema, Vancouver Art Gallery. 1972; re: La Région Centrale." Snow, "Final Real," October 1972)

De Duve then identified the "actual" author: "The machinery, of course, is an eye, a free-floating disembodied eye, seemingly omnipotent . . . and firmly centered in the middle of its horizon." In contrast to those who would "claim that Snow has restored the Cartesian-Kantian subject by presenting us with a mechanical concretization of its hitherto abstract and ideal model" de Duve claimed, "The eye of the machinery sees everything but itself. Contrary to the Cartesian-Kantian subject, it is not reflexive." Then there was the fact that the film was "so extraordinarily centripetal, and never centrifugal. The camera never reaches out into the landscape, it pulls the landscape towards the centre." De Duve went on to note that there was "no phenomenological accounting for that effect, save for this strangest hypothesis: I do not identify with the camera. I am here, no doubt, in the centre, there where the eye of the camera is, but my body is not, and thus, that's not me, here. I don't feel it's me. The sensation I get is one of kinæsthetic sensory deprivation.. . . Only through a quasi-philosophical act of reflection do I 'see' the blind spot which I, my eye, occupies" (34).

De Duve explored *La Région Centrale*'s cosmic center from another direction and different intellectual tradition, and it was on this basis that he was able to register the operation of an equivalent identity transforming process. Identity fragmentation and recomposition was initiated when the viewer's eye achieved a state of nonreflexive disembodiment while the viewer's mind remained potentially incarnated and reflexive. As de Duve pointed out, "Indeed, the reflexive movement of the mind is, albeit negatively, signalled by the body sensation that I have called kinæsthetic sensory deprivation."

> The result is space minus here: the a priori form of external sensibility without an internal reference point, that point which would be the subject, that point where I can say, through immediate intuition: here I am. I can still say "Here I am," but only through the mediation of a mental act of reflection. The same with the a priori form of internal sensibility: the result is time minus now. Although three hours are three hours, the experience I get from watching *La Région Centrale* (if we can call it an experience) is one of time going to all four cardinal points at once, time as laid down in matter, static, as if the fourth dimension could

> be felt. I can still say, "Now I am," however, but here again, through a mental act of reflection, or else, only when, for a fleeting moment, the yellow X jolts me out of my reverie or when the shadow of the machine passes through the screen. (34–5)

The film's key symbols invited, indeed, ignited reflection and opened the way for an awareness (a consciousness) of a kind of elementary *distributed* subject whose organization (and therefore its identity) was composed of free floating deictic nodes. De Duve summarized the new subject type in the following way:

> The I, the here and the now lie side by side, as the separate conditions for what is called experience, yet their synthesis is no longer called the subject. Conversely, the subject is no longer their synthesis. *I*, *here* and *now* retain the autonomy they have, and have always had, as mere linguistic pointers: they are the deitics of experience (35, emphases in the original).

La Région Centrale's visual experience was the new anti-environment in which a new type of identity was nurtured in distributed form. De Duve abandoned his discussion of *La Région Centrale* with the observation that "We are through with the deictics of experience, but we are not through with all deictics" (35). He then turned his attention to a final deictic "this," on his way to discussing other works by Snow, because it was only through this deictic that communication *made public sense*: "In front of the subject, there used to be the object. In front of *I*, *here*, *now*, set free, what deictic is going to take the place of the object?" De Duve's answer—"the linguistic pointer *this*"—pointed back to *La Région Centrale*'s key symbols and their roles in dis-articulating the Cartesian-Kantian subject thereby paving the way for a posthuman deictically distributed subject. De Duve continued:

> Among the strategies deployed by Michael Snow to set the pointer, *this*, free, and in particular, free of its objectness, we should not be surprised should we find self-referentiality, again. For what is the other name of *this*, if not "the referent"? That which is pointed at, and that which is spoken of. That which the work of art shows, and that which the work of art is about. To detach the "this" from its objectness, the best tactic might be to deprive it of its quiddity . . . so as to retain only its quality. And what better quality to a "this" than its colour? Sheer qualification without an object or a support, the modernist utopia, in fact, of monochrome painting. (35, emphases in the original)

It was surprising that de Duve did not return to *La Région Centrale* one final time with these observations in mind because they provided an answer to the

film's own deictic status as an objectless "this." Let us briefly return to de Duve's initial description of his experience of the camera activating machine's effects. De Duve proposed that the film did not engage with "the Cartesian-Kantian subject by presenting us with a mechanical concretization of its hitherto abstract and ideal model." On the contrary "The eye of the machinery sees everything but itself"—thus it was not reflexive: except for the brief sequences in which the camera activating machine's shadow appeared. Then there was the film's centripetal force, which "pulls the landscape towards the centre." As previously noted, de Duve argued that there was "no phenomenological accounting for that effect, save for this strangest hypothesis: I do not identify with the camera. I am here, no doubt, in the centre, there where the eye of the camera is, but my body is not, and thus, that's not me, here. I don't feel it's me. The sensation I get is one of kinæsthetic sensory deprivation.. . . Only through a quasi-philosophical act of reflection do I 'see' the blind spot which I, my eye, occupies" (34). If *La Région Centrale* processed its viewers in terms of its articulation of key symbols, it also subtly disarticulated their sense of identity by way of deictic fragmentation (Figure 5.5).

De Duve provided the logic through which to understand how *La Région Centrale* managed to *subtract* "objectness"—*thisness*—from its dual referents: the camera activating machine and the North Quebec landscape. In exchange it "materialized" a posthuman deictic subject while simultaneous "placing" the (posthumanized?) viewer in the center of its "eye," its "world." It was therefore not surprising, given these achievements, that the film constantly flirted with abstraction and the monochrome, *this* "illusionless" surface, the purity of which was frantically stimulated (animated) by emulsion-based "grain motion"; nor was it surprising that it fleetingly, yet obsessively exposed the *shadow* of the machine that inhabited its center—its central region—*its blind spot*. The central machine's fragmentary shadows were, of course, simply an artifice of light: sunlight—but also the projector's light. On the one hand, the "thisness" of film could only be "experienced" as pure *light*, but only on condition that the light impacted on a material surface: the pure white or off white monochrome of the theater screen. On the other hand, one could only "experience" the film provided that that surface had been *eclipsed* by the film's medium of transmission: light. Once all the deictics were activated in a viewer's mind, the film's (ritual) objectives were attained, and Snow's defamiliarizing remark that "The film is a cosmic strip" made perfect posthuman sense.[15]

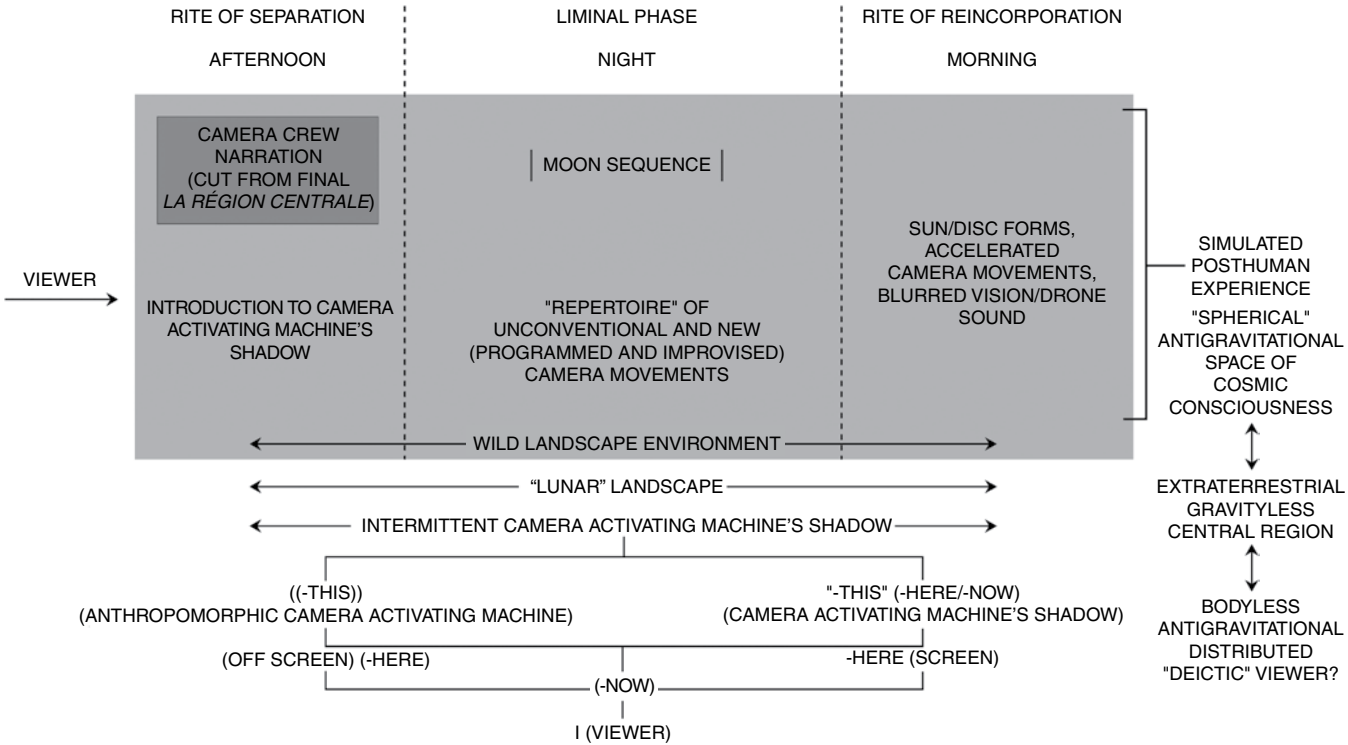

Figure 5.5 *La Région Centrale*'s basic rite of passage structure and logic of deictic fragmentation.

6

De La (1969–71): Authorship, Automation, and the Posthuman

La Région Centrale's distinctiveness as experimental "cosmic" experience and posthuman rite of passage was based on its sophisticated mechanical and electronic infrastructure (the camera activating machine and its console), a fluid, goal-oriented organization (a small crew, use of automobile and helicopter transport, etc.), a certain degree of luck in the case of technical problems and weather (soundtrack, camping in the wild, etc.) and Snow's capacity to raise the necessary funds. However, the two most important ingredients from the viewpoint of its reception were the location (which was free, but not easily accessible) and the successful design, construction, and use of the camera activating machine.

Although the camera activating machine was an equal partner in Snow's project, there was a marked—openly acknowledged—inverted *positive* location-based presence/*negative* (absence of any direct film projected image of the machine)—hierarchy between the finished product (*La Région Centrale*) and the machine that effaced itself as a precondition for the film's existence. If the camera activating machine was the "star" of the film, then it was, as its ubiquitous shadow suggested, a singularly anonymous one.

At the time that it was being built, Snow was not concerned with the camera activating machine's "look" but only with how it functioned. As he pointed out in retrospect, "What the machine looked like was at no time of any interest to me. That it should function in the way imagined was what was required." However, "It turned out to be strong sculpturally and interesting to watch in motion."[1] This unforeseen quality was noted as early as 1972, when he confessed, "As it was being built, I started to think about the machine as a thing in itself, and to see that it was beautiful. . . ."[2] By 1990, he affirmed that

"In the case of *La Région Centrale* the machine to move the camera became or always was sculpture."[3]

Snow therefore decided to produce a new work that would feature the camera activating machine and since he was interested in the real time possibilities of video-based installation, and had already explored some ideas around 1969, he decided to couple the machine with a closed circuit video camera (Figure 6.1).

> I called the new piece "De La" implying De La Région Centrale. The film and the video installation are so different for it to be almost possible to consider them opposites. In the film the spectators are outside the image but are affected viscerally. The landscape is elsewhere but the effect on the inner ear is not fictional. In *De La* the spectators are in the image and they are in the space depicted. They may be spun in the picture but their feet are on the ground. The small size of the image and the possibility of the spectator motion change the effect and meaning of the identical camera motions in the film and *De La*. (MSF-TLA, 48–1, "Recontres Internationales, Paris, 1990; Drafts of lecture on 'La Région Centrale' and 'De La,'" n.p.)

De La (1969–71), was basically a sculptural presentation of *La Région Centrale*'s camera activating machine with two important modifications: its 16mm movie camera was replaced by a video camera and four television monitors were added to receive the video signal that the video camera generated.

De La was composed of the camera activating mechanism presented on an 18" high, 8' diameter plinth encircled by another autonomous circular form of a slightly smaller height that seemed to function as a shallow security wall designed to demarcate a spectator space and the mechanical sculpture's intimate operational space (the space marked out by its circulating "arms"). It also functioned as a mediating structure for the electric and remote control communications cables to enter the camera activating machine's base by way of its plinth. This central complex was surrounded by four television monitors (Figure 6.2). The result was a visual work that was significantly different from *La Région Centrale*, as Snow acknowledged.

> Both the film and the installation work are such particular uses of cinema in one case and video and sculpture in the other that I hesitate to draw any conclusions in respect to the mediums employed. *La Région Centrale* was made for cinema and its particular viewing situation, a theatre. Even today I don't believe it could be shown as video . . . and retain many of its original qualities or effects. I believe *De La* succeeds as a sculptural work because the spectators move as in most

Figure 6.1 Installation shot of *De La* at the National Gallery of Canada, circa 1971. © Michael Snow. Courtesy of the National Gallery of Canada, Ottawa.

> gallery situations and their movement changes their views of the sculpture and that movement also changes what is in the images. The spectators contribute. In order to properly see a sculpture in-the-round a viewer should look at it from many different views. In this case, one does that but so does the sculpture in *De La* and it describes what it sees on the monitors around it. (MSF-TLA, 48–1, "Recontres Internationales, Paris, 1990; Drafts of lecture on 'La Région Centrale' and 'De La,'" n.p.)

The idea of a pictorially self-conscious, self-reflexive "sculpture in-the-round" that could mimic a spectator's reflexivity pointed beyond the new work's intimate relationship with traditional museum-based categories of objects such as painting and sculpture, a least insofar as the spectator's relationship was concerned. *De La* exposed the camera activating machine's anthropomorphism, aspects of which were periodically revealed in the machine's fleeting shadows during *La Région Centrale*'s unfolding. There was also a clear break with the latter's references to Canadian landscape and the European modernist painting

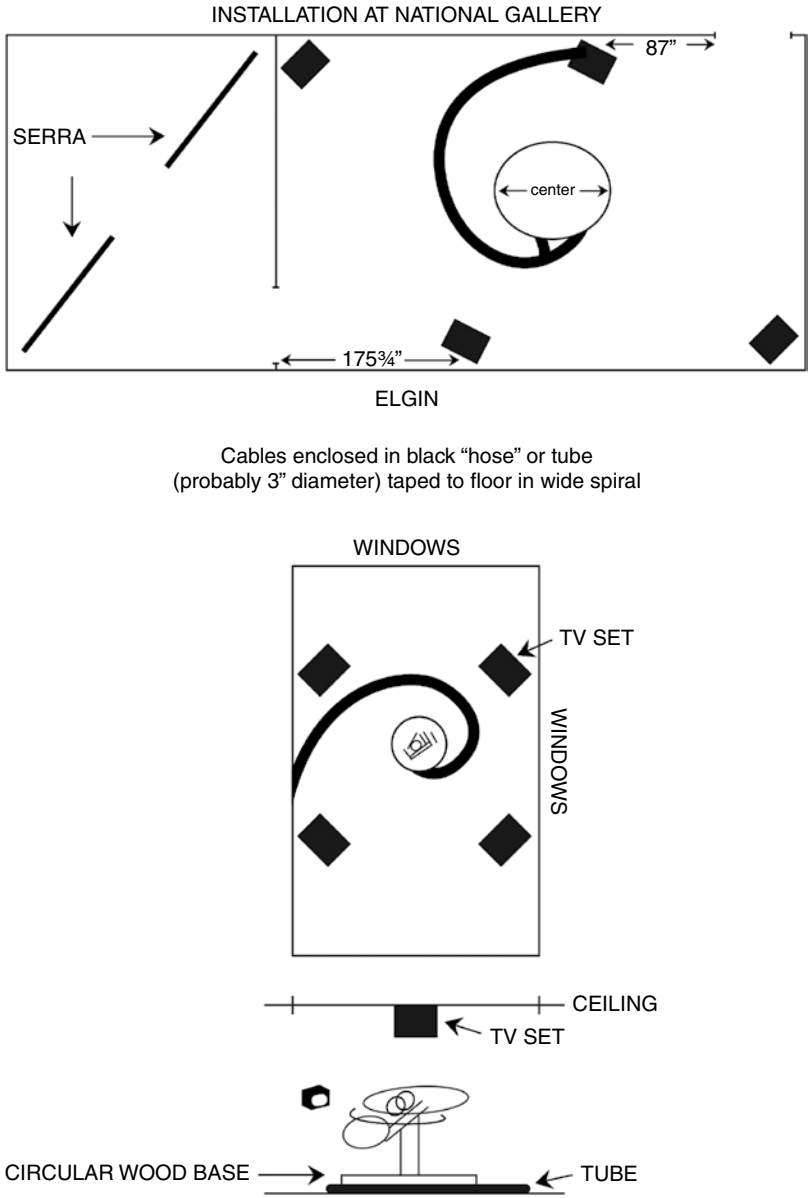

Figure 6.2 Ground plans for the presentation of *De La* at the National Gallery of Canada based on sketches located in *De La*'s curatorial file at the National Gallery of Canada. Note the spiral configuration of the electrical and video cable tubing. © Michael Snow. Courtesy of the National Gallery of Canada, Ottawa.

traditions. In their place, *De La*'s self-reflexive, environmentally "conscious," sculpture in-the-round's distributed spatial experience embodied a purely formal, relational sequence of architectural references that highlighted its more abstract engagement with location, position, and space. There was, for example, a shift from one type of experience to another whereby a "viewer" was transformed into a "spectator," as *La Région Centrale*'s promotion of a cosmic experience was transposed into the endorsement of machine beauty and a formal and neutral investigation of architectural space. It is interesting to note, in this connection, that the camera activating machine's dormant predisposition toward voyeurism and surveillance, tendencies that were sublimated by the machine's complex antigravitational 360° movements in *La Région Centrale*, were exposed to public scrutiny in the context of the installation's new location and final home: The National Gallery of Canada.

De La introduced 1970s National Gallery of Canada spectators, and others in later exhibitions in which it featured, to the camera activating machine's scripted, remote controlled possibilities through the continuous transmission of electronic images to television receivers in *real time*. On the one hand, the new installation served as a spectacular display of the machine *and* the complex, variable sequence of visually encoded spatial relationships that its movements could generate, and its camera could register, in relation to a three-dimensional location. The resulting electronic image flow was the product of a continuous translational process that took place across an interface composed of camera frame and the architectural frame (the environment, or exhibition space, in which the installation was placed). On the other hand, it presented the visual results of these relationships simultaneously on four television monitors thus creating a further reframing of the visual data transmitted by its video camera (Figure 6.3).[4] In doing so, *De La* celebrated the untapped possibilities that lay within *La Région Centrale*'s unexplored central region—the unmapped zone that the camera activating machine's fragmentary shadows had alluded to during the film's 3-hour duration. It also "celebrated" the machine's real time operating sound and its continued capacity to produce images "in the round" without implicating its own pictorial presence. One of *De La*'s principal features was, in fact, the new relationship between sound and image that it produced. In Snow's words,

> I think the sound of the machine is quite beautiful and is a really essential part of the whole composition. The T.V. image is magic: even though it is in real

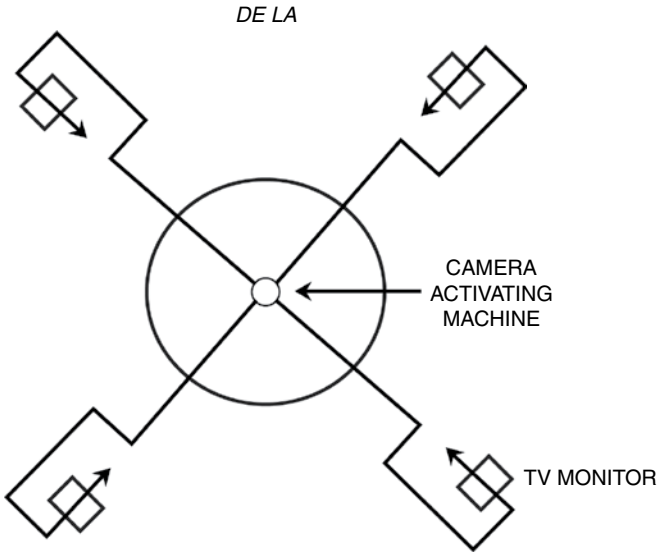

Figure 6.3 *De La*'s X-based distributed image transmission circuits.

> time, simultaneous, it is a ghost of the actual which one is, in this case, part of. The machine which is orchestrating these ghost-images is never seen in them. It belongs exclusively to the "real" side of this equation. The sound is an essential part of the concreteness of the machine, if it were silent it would tend more towards a representation and also have less "personality" as a unique thing in the world. (Letter, Snow to Pierre Theberge, nd (1971), National Gallery of Canada *De La* Curatorial File)

Snow's "sculptural installation" was first presented at the National Gallery of Canada between March 12 and April 11, 1971 and it was purchased by this institution in 1972 after extensive modifications to its electronics and control systems. Its conversion into a sculptural installation was important because of the transformation's impact on the question of authorship, and, through this question, on *La Région Centrale*'s rite of passage structure and posthuman function. How did the transformation of a clandestine—spectral—authorial mechanism into a public display object change *La Région Centrale*'s radical propositions?

De La was first presented at the National Gallery of Canada under the title *De La Région Centrale*, and the work, at this time, was credited to Pierre Abbeloos *and* Michael Snow (Figure 6.4). The accreditation raises interesting questions about the camera activating machine's identity as *artwork*, as opposed to a piece

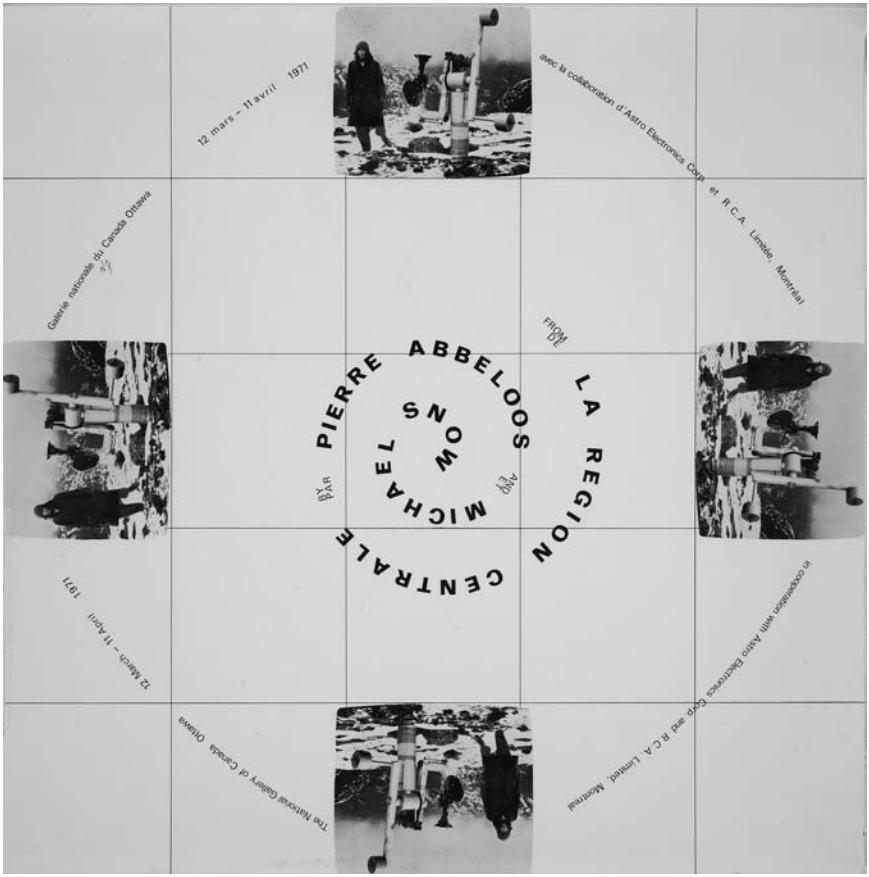

Figure 6.4 *De La* at the National Gallery of Canada, March 12–April 11, 1971. The poster's sophisticated design replicates the lack of fixed orientation that was one of the defining characteristics of the images produced by the camera activating machine. It also creates a direct interface between *La Région Centrale* and *De La* through its use of an iconic image of Snow standing beside his machine in Northern Quebec. The spiral form of the central portion of the poster alludes to the recurring spiral motif in relation to both the film (Figure 3.1) and the sculptural installation (Figure 6.2). The Poster was designed by Michael Snow. © Michael Snow. Courtesy of the National Gallery of Canada, Ottawa.

of technical apparatus (like a movie camera). As noted in Chapter 2 (n. 5), in addition to the various diagrams and notes, patents and automatic pan and tilt and motorized zoom lens brochures and prices, Box 10, File 5, of the Michael Snow Fonds at the Art Gallery of Ontario, contains a scrap of paper with a list of proposed names for the camera activating machine. The list, presented under

the title Pierre Abbeloos, and its layout suggest that Abbeloos was the camera activating machine's designer and constructor.[5] The detailed description of the camera activating machine, the patent application documents, and the note concerning Abbeloos' role in its design and construction also suggest that Snow distinguished between the *idea* of using a new kind of automated tripod head and its actual design/construction, even if the authorial boundary between idea and design remained fluid under such collaborative working conditions.[6]

Until *De La*'s purchase by the National Gallery of Canada in 1972 it is nevertheless clear that the camera activating machine was "coauthored." However, when *De La* was officially acquired by the National Gallery of Canada, Snow was credited as its sole author.[7] This authorial shift in the camera activating machine's history is interesting because questions of authorship and identity impact on the camera activating machine's status in the film and the installation and through them on the composition of the posthuman subject that each work proposed. By reclaiming authorship of the camera activating machine in the name not only of artistic creation, but also through the *idea* or possibility of imagining the existence of a machine (as opposed to the solution of its successful construction), Snow effectively called into question the radical gesture of anonymity posed in *La Région Centrale* inasmuch as the latter was the product of the locational "eclipse" of the public—*and* private—*identity* of camera activating machine as author. In place of a celebration of the machine and its capacity to see things that a human eye could not, one was confronted with a filmic invention, and affirmation, of its *absence*. *La Région Centrale* presented a "vision" that appeared not only to be an autonomous creation, but also a visual experience that was independent of *human* production. However, by signing the film in *his* name, Snow negated the camera activating machine's/film's claims of creative autonomy. De Duve pointed to this gesture's paradoxical significance when he stated, "He deserves the pride of having signed *La Région Centrale*, it is *his* masterpiece.. . . It is his masterpiece and yet, again, what the film conveys is not his experience" (de Duve 1995: 34, emphasis in the original). But then, Snow had written a film script, intervened in real time in the program's on-site execution and he had also edited the film. *La Région Centrale* was not, as Locke had claimed, "the first autonomous camera film." It was, however, an important step in that direction as well as being an important and unique *experience* of a 1960s collective cosmic consciousness. *Experience*, as de Duve had argued, was the only adequate measure of the film's autonomy.

The camera activating machine's unique aesthetic status (as expressed in the beauty of its form and automatic actions) was publically celebrated in *De La*—an observance and rite that could only take place because the machine was recycled back into public view (with important electronic modifications) and its real time spatiotemporal capacities were extended through the addition of a video camera and four monitors.[8] As Snow realized, the new work produced a radically different perceptual/locational and *institutionalized* experience. His extended comparison is worth reproducing in full:

> "La Région Centrale" was made to be shown in a cinema theatre where a spectator abides by the traditional "contract" of a theatre client with the architectural and social conditions of a theatre, seated here and looking there, anticipating a duration.
>
> "De La" is a 3-dimensional, sculptural, kinetic installation made for an art gallery space. As is traditional, the spectators are ambulatory, not asked to stay in one place, the work itself suggests the spectatorial approach involved in viewing sculpture "in-the-round" (not on the wall).
>
> Despite the fact that the "camera-activating machine" which I conceived of and which was constructed by Pierre Abbeloos is central to both "La Région Centrale" and "De La," from a phenomenological point of view, as the perceptual experiences of a spectator they are almost opposites.
>
> "La Région Centrale" as much as it depicts a landscape is not a "picture," what a spectator experiences is the effects of the projection of the recording on film of various controlled movements at various speeds of the camera being moved in very varied but always circular or elliptical movements.
>
> The "picture" aspect is that "La Région Centrale" is "of" an Elsewhere and Another Time. There is an "illusion" whereas, as befits traditional sculpture, the images in "De La" depict what one sees of the space that you are in, in the Now.
>
> A lot of feelings can come out of the Elsewhereness of what is represented rubbing up against the present tense experiences of the camera motion in "La Région Centrale."
>
> "La Région Central" is not a "documentary." "De La" is, but it documents where the spectator is.
>
> The "La Région Centrale" spectator will go through many inadvertent physiological adaptations in their ways of perceiving the panning of the image.
>
> One of the strongest is the camera to camera (using the word in its original Italian: chamber or room) exchange that can happen. One feels that the "camera" that one is in (the theatre) is moving over the landscape with you in it.

> Vertical pans can have the spectator seemingly sinking or rising. Spirally rotations involve personal adjustments in our "sight-lines," one learns how to look at something never seen before.
>
> The spectator's sense of gravity can be strongly involved. There can be dizziness.
>
> And there is sound. The quiet electronic beeps do not emanate from the landscape, they have to do (I think, one would conjecture) with instructions to or by-products of the making of the moving image.
>
> The sound is in rough synch (for eg. fast when the image is fast) with the picture (certain pitches for vertical or horizontal etc.) but they (the "nervous system" sound) and the "bodily" motion star come apart during the last 45 minutes of the film which leads to a "breakdown" of communication and the end of the film.
>
> The only still frames in the film are the occasional X images but even they sometimes cause the spectator to experience movement in perceiving them. Slow spinning or floating up happen. It's a variation of the "which train is moving" phenomenon.
>
> None of the foregoing happens in experiencing "De La." It is emphatically "real time." One watches the graceful movements of the metal kinetic sculpture which one recognizes has a camera on it.
>
> Simultaneously one sees on the monitors what the camera sees and how it sees. One sees a representational system in operation and one compares its "results" with one's own appraisal of the objects which are being depicted which often include you.
>
> "De La" is, in another description: watching a mechanical artist depict, the space it is in, electronically, its subject.
>
> I don't think there is much, if any, affect on one's sense of gravity compared to "La Région Centrale." (Michael Snow, email to the author, April 23, 2007)

With this extensive and subtle comparison, Snow has registered a useful and refined inventory of the distinctive operational characteristics of each work. While distinct, each work pivoted on an identical, if internally modified, machine and a similar programming logic (as opposed to the same program). Snow's comparison is exhaustive and authoritative in the sense that there is no confusion about the relative functions of each work and their impact on the viewer/spectator. The differences between the two works are perhaps best captured in the case of *De La*'s documentary mode of operating—the fact that it "documents where the

spectator is" and it also stands as a self-reflexive document: a fascinating object that functions like "mechanical artist" depicting "the space it is in, electronically, its subject"; but also a didactic object that presents itself as a "representational system in operation" which allows the spectator to compare "its 'results' with one's own appraisal of the objects which are being depicted which often include you." If *La Région Centrale* created an intense immersive experience in a movie theater's black box environment, *De La* created an open-ended *tutorial* based on a skeletal immersive schema. *De La*'s immersive strategy was simply, yet spatially and visually (pictorially) astute: to place the spectator between the sculptural object and the television monitors thereby providing a means for the spectator to appreciate the camera activating machine as a traditional sculpture "in the round." However, it self-reflexively provided a means of critiquing this classical relationship through the television monitors' X-based placement, which forced the spectator to turn her/his back on the central sculpture, or to see through or around it, when the monitors were, from the spectator's viewpoint, situated "behind" the sculpture.

Once engaged, *De La*'s three-dimensionally deployed real time documentary "analysis" was as fascinating as *La Région Centrale*'s retinally mediated visceral experience. It continuously fragmented the architectural environment in which it was situated through the flow of electronically processed images that were channeled through the static frames of the four television monitors. This optical fragmentation and the resulting perceptual destabilization were accentuated by the circular movements of the camera activating machine's arms. If in the case of *La Région Centrale* "one learns how to look at something never seen before," then in *De La*'s case one was introduced to a *demonstration* of how the camera activating machine could transform a three-dimensional architectural space into a fragmented and distributed visual experience in real time. Its visual results stood as a quintessential "cubist" document—an objective testimony—to its analytic capacity to represent itself representing the space in which it was located.

De La was also a homage to *La Région Centrale*'s central region, its inhabitants (machine and viewers), and image culture. The sculptural installation acknowledged the significance and importance of the camera activating machine by celebrating its physical beauty and individuality, as well as its "intelligence" and creativity. *De La* simultaneously also displayed the machine as a "unique" object and museum artifact. But most importantly, it also promoted it as a *star performer*.

There were other distinctions that Snow did not address. While there were no reflexive and structural markers like *La Région Centrale*'s Xs in *De La*, the sculptural installation was based on a similar graphic form from the viewpoint of its ground plan (see Figures 6.2 and 6.3). Since the four monitors were placed in an X-like configuration, *La Région Centrale*'s ubiquitous graphic marker was phantomatically recreated in the form of a unique blueprint and frame for the installation. The center of the X—the location corresponding to the screen center in *La Région Centrale*'s film frame was occupied by the camera activating machine. Each monitor thus "faced" the camera activating machine in the manner of a spectator whose interest was focused on this beautiful, dynamic, and autonomous machine-eye whose activity continuously redirected the spectator's gaze into the installation's four corners thus constantly puncturing and redefining its geometrically defined frame/architectural limits.

In may ways, one's experience couldn't be further away from the kind of visual, social, and political experience promoted by the objective's and ritual structure of a film like *The Man with a Movie Camera*, and yet a kinship does link the two together.

The transformation of the spectator's consciousness takes two distinct forms in Snow's film and sculptural-video installation, even though there are no explicit social or political objectives behind the mechanical logic of the apparatus, its programming, and the visual results of the camera movements. In 1986, for example, Snow described the visual experience produced by *De La* in the following terms:

> It's an inclusive kind of experience, different from the archetypical relationship to a work of art in which you're standing here and examining something on a wall. In this case you are part of the production and watching it, and the movements of the machine itself makes for a transformation of the image that is different from seeing yourself on a television with a static camera. (Snow quoted in Friis-Hansen 1986: 26)

Inclusion—in other words, "immersion"—was a key objective of both works, but the approach adopted and the results were significantly different in each case. Each work engaged with the concept of immersion from different structural/perceptual points of view and different representational paradigms: optical/chemical in the case of *La Région Centrale* and optical/electrical in *De La*'s case. If *La Région Centrale* belongs to the same film tradition as *The Man with a Movie Camera*, then *De La* belongs to a new image paradigm that Farocki

would explore 30 years later in his *Eye/Machine* trilogy and *Counter-Music*. After all, it was McLuhan who declared, in his celebrated sentence, that "The medium is the message" and that it referred, "in terms of the electric age," to the creation of "a totally new environment." It was also McLuhan who argued that "The 'content' of this new environment is the old mechanized environment of the industrial age."

> The new environment reprocesses the old one as radically as TV is reprocessing the film. For the "content" of TV is the movie. TV is environmental and imperceptible, like all environments. We are aware only of the "content" or the old environment.. . . The machine turned Nature into an art form. For the first time men began to regard Nature as a source of aesthetic and spiritual values.. . . Each new technology creates an environment that is itself regarded as corrupt and degrading. Yet the new one turns its predecessor into an art form.. . . the electric age taught us how to see the entire process of mechanization as an art process. (McLuhan 1964: ix)

As these observations suggest, environmental immersion functions in different ways according to which visual paradigm it operates under; and its content is different in each case. Nature and machine, landscape and architecture, the machine implied or the machine presented and celebrated—*La Région Centrale* or *De La*: Snow's film and his sculptural video installation functioned as the quintessential environmental models of the mechanical and electrical ages they represented and celebrated, each in their own incomparable way. But, oddly, their models have a common machine-based foundation: the camera activating machine.

McLuhan suggested that sensory translation via media not only led to a recalibration of the sense ratios and the transmission of new kinds of experience—*of forms of knowing*—but that translation could, in the electric age, lead to a collective, global information consciousness (McLuhan 1964: 63–7).[9] *De La* proposed a particular sensory experience based on the camera activating machine's performance within an electric environment of the kind that was instituted by television and video recording. It did so, by transforming the television into a real time image receiver-redistributor. It was by this means that the sculptural installation allowed the spectator to grasp, in McLuhan's words, "the implications of his [the artist's] actions and of new knowledge in his own time." The spectator was placed, in other words, in the position of the artist who had ". . . integral awareness"—an awareness, as McLuhan suggested, of "the exact

THIS **(CAM)** ← → I **(S)** ← → "THIS" (-HERE/-NOW) **(TV)**

-HERE ← → -NOW

Figure 6.5 *De La*'s system of posthuman deictic fragmentation (*TV monitor, spectator, camera activating machine*).[10]

specifications of coming violence to their psyches from . . . counter-irritants or technology" (1964: 71). However, what exactly are the specifications that *De La* displays? The answer is the experience of deictic fragmentation that was presented in *La Région Centrale* under its own *mechanical* regime of the senses—translated, in *De La*'s case, by a post-mechanical, electric regime as represented by late 1960/early 1970s analog video signal transmission conventions.

While the camera activating machine remained the same, from the viewpoint of its structure (if not in terms of its electronics), one type of camera (16mm Arriflex BL) was replaced by another (Shibaden HV 15 Vidicon camera with wide angle lens), thereby consolidating the control of the electric regime's elements that were invisibly active in the case of the camera activating machine's electric motors, wiring, and console.[11]

However, what happens when a machine, itself a hybrid mechanical/electric and electronic entity, is used to translate visual date into information about the nature of immersive experiences under different mechanical and electric environmental paradigms? *Moreover, what is the status and function of the program as metaphor and electromagnetic medium in this process of posthuman collectivization?* In order to appreciate the cultural significance of how these works function in relation to each other and also to recognize their singular contributions to the respective paradigms they represented, one has to place them in the context of *The Man with a Movie Camera*'s rite of passage model.

7

A Comparative Schematic Analysis of the Automated Narrative and its Mechanical Logic in Vertov's *The Man with a Movie Camera* (1929) and Michael Snow's *De La* (1969–72)

In Chapter 1, I explored some of *The Man with a Movie Camera*'s salient sociopolitical characteristics from an anthropological point of view. I demonstrated that Vertov's film is structured and its content is organized and presented in a way that suggests that it operates as a transitional rite of passage ritual between two well-defined sociopolitical states of existence that correspond to a pre- and post-Soviet society. If any pre-digital film can be treated as a rite of passage in terms of its optical/chemical process, classification system, and basic physical/symbolic transformation process, then Vertov's film represents a special case because of its intense form of reflexivity and the way that it structures and presents its subject matter.

As I noted in Chapter 1, there are three basic sets of correspondences and transformations that are explored in *The Man with a Movie Camera*.

- The film presents a sequence of eye/camera analogies that promote analogical and metaphorical relationships between the human eye, the world of machines, and machine vision as represented by and through the medium of film;
- It "tracks" the activities of a camera man and suggests an ultimate transformation into a camera-based automaton at the beginning of the film's rite of reincorporation, but only after the former's activities have been

thoroughly scrutinized and the boundaries between the human body and movie camera have been challenged and dissolved in the context of the film's radical, reflexive exploration of its own language, process of production, and relationship to other manufacturing systems;

- The film engages with the spectator's consciousness with the objective of transforming it under the guidance of the film's themes and its ultimate political objective: to produce informed, socially engaged Soviet citizens.

The Man with a Movie Camera's complex rite of passage functions are based on two important socio-technological innovations: The creation of a social imaging system, articulated on the basis of observation/manufacture, and the utilization of an interval-based montage logic that ties the basic difference between two film frames to kinok-based social organization and, through that organization, to the film's thematically based narrative organization.

Snow's *La Région Centrale* also exhibits a rite of passage structure and function but its context and objectives are very different from Vertov's film. If the similarity between the two films resides in their exploration and promotion of machine vision and its relationship to the machine-based posthuman, then their point of view on this question reflects the historical context in which their exploration took place: The First World War, the inaugural decade of the Russian Revolution versus the 1960/1970s with the decades' background of long-term geopolitical tensions related to the Cold War, its rivalries and sociopolitical and cultural derivatives; the Vietnam War, on-going East-West competition in relation to space exploration, wide-ranging, nebulous countercultural activities, revolutionary and proto-revolutionary events (France, May 1968). Within the context of this history there were the possibilities represented by McLuhan's anti- or counter-environments and their artist-creators, the men and women "of integral awareness." It was within these possibilities that "expanded cinema" would find its place and voice through the writings of Gene Youngblood among others. For Youngblood, this new cinema represented the dawn of a *paleocybernetic* age. As he argued,

> We're in transition from the Industrial Age to the Cybernetic Age, characterized by many as the post-Industrial Age. But I've found the term *Paleocybernetic* valuable as a conceptual tool with which to grasp the significance of our present environment: combining the primitive potential associated with the Paleolithic and the transcendental integrities of "practical utopianism" associated with Cybernetic. So I call it the Paleocybernatic Age: an image of a hairy, buckskinned,

> barefooted atomic physicist with a brain full of mescaline and logarithms, working out the heuristics of computer-generated holograms or krypton laser interferometry. It's the dawn of man: for the first time in history we'll soon be free enough to discover who we are. (Youngblood 1970: 41, emphasis in the original)

Perhaps the word "paleocybernetic" can also be applied, with hindsight, to the evolutionary status of the posthuman that was beginning to take shape through primitive pieces of equipment that could link the human body and the world of machines, such as we see in the case of *The Man with a Movie Camera*'s stop motion camera-tripod animation sequence, just as it could also be employed in the case of the camera activating machine that was used in *La Région Centrale* and *De La*. It is perhaps not without significance that a mechanism that has not been given its due linked Vertov and Snow's films in a way that suggests a far from minor role in the shaping of the paleocybernetic posthuman in these cases. This mechanism is the tripod head.

The tripod head is designed to connect the movie camera with the tripod in order to provide the maximum omnidirectional movement (based on the tripod's pan and tilt logic) that is possible for a movie camera to achieve under these technical parameters. Vertov's film features the cameraman and his tripod and also their evolutionary successor: the autonomous stop motion camera/tripod "figure" whose movements and behavior mimic those of a human body. Snow's camera activating machine can be treated as a sophisticated, integrated tripod/head and its form and apparent "automaticism" suggests that it was also designed to replace the human body in theory if not altogether in practice during the process of shooting *La Région Centrale*.

While *The Man with a Movie Camera* explored the nature of machine vision through its use of unconventional narrative strategies and special effects, Snow's film and sculptural video installation explored machine vision through a mechanized, semiautomated "scripting of space" based on a scenario or program (Figures 5.3 and 5.4). A filmmaker, teams of kinoks, and editor guided *The Man with a Movie Camera*'s exploration of machine vision through its montage-based construction from initial idea, observations, to final "film object." *La Région Centrale*'s direction and speed of camera movement and its lens were controlled by way of a remote control unit. *De La*'s camera movements were based, on the other hand, on the same basic logic but without on-site human improvisation since Snow suggested 3 possible settings for the dials, one of which would be chosen by the exhibitor. However, in each case, the tripod or its operational

equivalent (custom designed camera activating machine) provided the medium through which machine vision and its culture were explored under the tutelage of different programs and improvised movements.[1]

The privileged access point to a machine culture in both cases was a tripod head, in form or another. This mechanism served as the *model* through which machine vision and its viewpoint on the world were explored within specific sociopolitical and formal/ritual/environmental parameters. When it was not used in *The Man with a Movie Camera*, it was replaced by a surrogate, such as a motorcycle. However its significance was most conspicuously celebrated in the film's camera/tripod stop motion animation sequence. Snow's camera activating machine, in contrast, represents a bridge between the world of machines and their analogically based methods of seeing and recording the world and that of automatic machine-based vision. It represents a mechanical prototype for the late twentieth century's autonomous digitally based electronic surveillance systems with their predispositions toward collective omnidirectional vision; even if Vertov's Kino-Eye kinoks-based organization of observation/manufacture serves as an early-twentieth-century reference for their distributed logic. In both cases, however, they function as prototypes both for the space produced and for its means of production. In the following chapter devoted to Farocki's films we will see how these prototypes were superseded by a far more sophisticated distributed model and equally sophisticated automatic computer programs that circumvent a human operator's presence altogether.

Snow produced a film, in *La Région Centrale*, that displayed the camera activating machine's capacity to expand film language in a way that complemented but also extended Vertov's 1929 experiment. Vertov's vision of the movie camera and its possibilities were confined to the representational space of 35mm film where its achievements were registered first hand (effects of camera orientation and movement) and second hand (pictures of the cameraman in action, in-camera special effects such as double in-frame exposure—montage—of camera lens and human eye, or through the "illustrative" use of stop motion animation). Whereas the Soviet filmmaker used the movie camera to produce a film that explored its first- and second-hand reflexive possibilities from within the confines of the film frame (from in-frame montage to its relationship to other film frames), Snow used the camera activating machine to explore immediate visual effects, governed or influenced by the internal physical and metaphoric parameters of the film frame as it was "transported"—almost as an ideal pictorial boundary form—through the convoluted geometric spatial figures produced

by that machine; its transformations registered through its relationship with a specific geographical location. The distinction is subtle but worth noting. On the one hand Vertov's movie camera was still tied to the human body and its physical boundaries and limitations (height, stamina, etc.), and on the other hand the camera activating machine released the camera from some of these limits (it was able to achieve operational speeds and complex geometric movements that were beyond a cameraman's physical capacities). It was only when the kinoks used automobiles, trains, and motorcycles as "mechanical legs" and mobile "tripods" that they entered into a privileged dialogue with machine vision and its culture with its specialized infrastructures (roads, railway lines) and its multiple abilities to transcend organic boundaries (by way of, for example, speed or the montaged layering of information in the case of multiple exposure). But, these moments could not be sustained, or were not imagined to be sustainable over extended periods of time. It was only with such films as Andy Warhol's *Empire* (1964) and Snow's *La Région Centrale*, that the cinema viewer was treated as a guinea pig in extended perceptual experiments based on the movie camera's physical capacity to mechanically produce standard lengths of film that, when linked together, could produce a visual experience that breached conventional cinema's narrative and temporal standards of viewer engagement. These were the kinds of films that were able to redefine human experience within the context of a machine's capacity to breach the perceptual frontiers of the body's and mind's habitual operational environments in order to expose the spectator to facets of a nascent posthuman culture, its infrastructures, systems and conventions of operation and their implicit, radical performance-based points of view and critiques of the ancient slowly evolving organic world they were progressively replacing. We have already explored the results of both Vertov's and Snow's film-based approaches in relation to a classic rite of passage ritual structure. What remains to be explored is *De La*'s rite of passage structure when compared to the ritual processes presented in the forms of *La Région Centrale* and *The Man with a Movie Camera*.

Vertov and Snow explored and celebrated the camera's ability to function as one of the most powerful representatives of machine culture through their capacity to expose its remarkable abilities to see the world in a "nonhuman" way. Obviously they were both aware of the camera's origins and parameters but they argued, each in their own way, in *The Man with a Movie Camera* and *La Région Centrale*, that machines offered new visions of the world as well as a different way to conceive of the human subject, its experience, and identity. In Vertov's case,

the camera was still attached to the human body. Although limited by the latter's physical dimensions, Vertov proved that it could move as freely as the human organism and yet, most importantly, it could still "see" (register) visual data in a new (Soviet, defamiliarizing, constructivist) way. In contrast, the camera was tied to a motorized mechanism (which is equivalent to a motorized tripod head) in Snow's film and sculptural installation. Although the camera was now, in theory, free from a human host, it was still tied to the "machine." Its activities were limited by the scale of the machine's platform or "tripod," the motion of its "arms" and the location in which it was placed. These limits restricted the capacity of the machine system to attain a posthuman "extraterrestrial" freedom, even though the camera activating machine's ability to generate complex camera movements could nevertheless be perceived as durationally and permutationally "infinite," as in the case of *De La*. However, the constraints in both filmmakers' cases were also calculated and environmentally tailored to specific objectives whether they were urban and sociopolitical or formal and environmentally "cosmic." Finally, although Vertov's and Snow's films/video produced narratives about machine culture and its urban manifestations (Vertov) or inner/"outer"—cosmic—environment (in the case of *La Région Centrale*), they did so according to their own equipment, modes of social organization or association (in Snow's case) and visual objectives. Thus the relationship between machine, its culture and narrative was radically different in each case but were related through a common, if implicit, teleology.

For Vertov, the narrative was manually constructed and tailored through a Kinok film observation/manufacturing process that was structured in terms of a rite of passage. The camera was at the foundation of this process. Both camera and observation/manufacturing processes were "naturally" and ideologically associated with the human body, while their spatiotemporal flexibility was governed by the human organism's physical limits and capacity, including its capacity to organize itself into a collectivity.

In Snow's case, camera movement and film or videographic "narrative" were governed by the movement repertoire of a motorized "remote" controlled tripod head. Although the camera was nominally free of human control, it was still subjugated to the spatiotemporal—geometric—dictates of the "mechanism" (the scale of its platform or "tripod")—and a specific program (scenario) and its counter-practice of improvisation. This also applied to Vervov's and, in particular, Kaufman's use of both conventional, extended (automobile) or unconventional (motorcycle) tripod-like supports, as well as to their use of

different or modified cameras (Kaufman 1979: 55, 63–4, 68). Therefore, if Snow's innovative process of filmmaking was based on a specialized machine, Vertov's filmmaking practice was based primarily on an innovation in the social foundations of filmmaking, which was treated, in theory, as a "total" observational/manufacturing filmmaking process.

In both cases, a repetioire of linear, circular, elliptical, spiral, back and forth movements served as an armature for the exploration of the spatiotemporal characteristics of a specific medium/technology; and both filmmakers *proved* that these characteristics pointed to the existence of a machine-based world that was noticeably different from the "real" world as perceived by human beings of standard height and normal vision. Such machine-based movements were also used by each filmmaker to map a medium/technology's spatiotemporal characteristics, its machine-based cultural features and narrative possibilities. But, and this is important, both filmmakers constructed their films in such a way as to saturate the world with these characteristics by absorbing it into the film medium's post-natural possibilities. For example, circular, spiral, back and forth (past/present/future) shifts in *The Man with a Movie Camera* interfere with the film's basic sequential—hence linear and causal—spatiotemporal/narrative logic *even though these shifts take place within an overarching day-in-the-life-of-a-city structure*.

On the one hand, the correspondence between the theater environment portrayed at the beginning and end of Vertov's film produces a circular/spiral evolution in the film narrative which is also mirrored in a reflexive offscreen audience viewing relationship ↔ Screen ↔ onscreen audience viewing relationship as presented by the film. Insofar as the audience watching the film is watching an audience watching a film, during which process the former becomes aware of the fact that they are both watching the same film (*The Man with a Movie Camera*), the actual audience is drawn into the film's spiral spatiotemporal logic. Since the audiences are never *exactly* the same (they can never be perfectly duplicated between different spaces and times), the film's spiral logic, in collaboration with its symbolic and thematic content, produces a powerful, reflexive deictic experience.

On the other hand, the linearity of the medium (filmstrip), which is reinforced by *The Man with a Movie Camera*'s sequential, day-in-the-life-of-a-city model, is systemically disrupted by an acausal, antilinear spatio/temporal logic—a type of relativistic acausality—induced by the strategic placement of comparative thematic/narrative elements and punctual future/past references within each

category of the working day. This logic disrupts film's inherent propensity to favor narrative (sequential) coherence over an antilinear acausal spatiotemporal complexity, with its potential for promoting fragmentary, counterintuitive narrative cells, or clusters and patterns of visual data or information. Montage-based fragmentation disrupts the implied coherence that can exist between a real time viewing experience and the film's unfolding narrative through its ability to inject out of sequence film elements that point to various film future ↔ film present ↔ film past relationships. The effects of this approach are clearly visible throughout the film, but also when one compares the opening and closing sequences of *The Man with a Movie Camera* which produce a kind of spiral movement of the narrative which emphasizes its nonlinearity—indeed, radically, *its spatial simultaneity* and paradoxical temporal dislocation (Figure 7.1). This also explains the critical reflexive disjunction between audiences who appear to be similar but are never exactly the same (where the "Is" are "objectively"—locationally/generically—equivalent but never subjectively or historically identical).

Finally, there is the question of the presence or the "absence" of the human host/organism in both cases which lead to different definitions of the posthuman: cameraman/cyborg-based *versus* viewer, deictic-based (where the camera activating machine evokes the humanoid form of a performative authorial presence that functions as (posthuman) "midwife" for the creation of a special deictic experience).

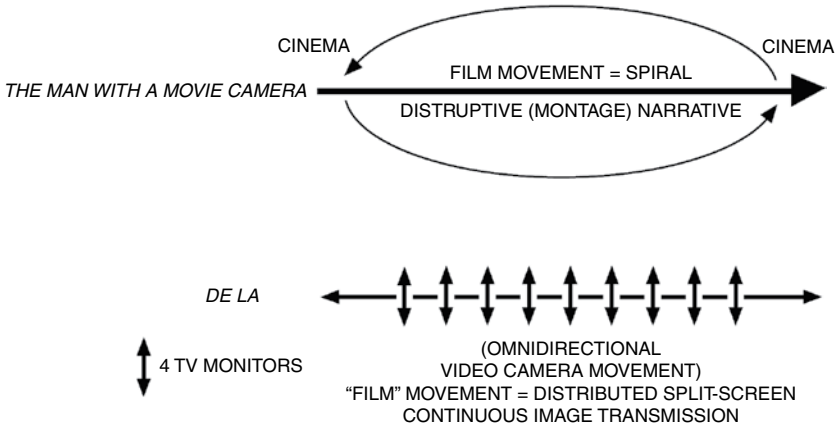

Figure 7.1 *The Man with a Movie Camera*'s basic spiral rite of separation/rite of reincorporation spatiotemporal logic in comparison to *De La*'s distributed logic.

De La's exploration of the formal/geometric nature of machine vision and its deictic consequences exposed the "system" that operated within *La Région Centrale*'s central region—and it did so in real time thus creating a situation where camera movement could be compared, in theory and in practice, to the images simultaneously presented on the four television monitors. However, *De La*'s layout undermined its transparent comparative mode of presentation. If the machine was exposed, then it was only to create a viewing environment where the geometric complexity of real time image production-transmission-reception created an experience that seemed to exist, once more, independently of the machine that had produced it: The images were produced so fast that by the time one's eyes had returned to the machine (*De La*'s own central region) in order to correlate image and camera position (or *vice versa*), the camera had moved on and the image had changed. One was constantly placed in the defamiliarizing situation of being caught in the past in the present. One was never quite here: The "I" was simultaneously conscious of being here (in the environment) and there (its fragments, captured by the moving camera, were continuously projected on all four television monitors in a way that seemed to echo the camera activating machine's ubiquitous shadows fragments that appeared throughout *La Région Centrale*)—the "now" was also split between the "here" and the "(t)here" (x4) as it rebounded between the instantaneous and the anticipated (which had to all intents and purposes already been swallowed up by the past). The deictic elements of viewer experience were the same as in the case of *La Région Centrale*, but they operated in a different way to create an experience which made perfect sense in terms of the work's title—*De La*—because each element retained a relational autonomy within a viewing experience that operated on the basis of the spatiotemporal (environmental) fragmentation of the viewer's reflexive sense of self, space, time, and place. As de Duve had observed in *La Région Centrale*'s case, "The result is space minus here: the apriori form of external reference point, that point where I can say, through immediate intuition: here I am. . . . The same with the a priori form of internal sensibility: the result is time minus now. . . . The I, the here and the now lie side by side, as the separate conditions for what is called experience, yet their synthesis is no longer called the subject. Conversely, the subject is no longer their synthesis" (de Duve 1995: 34–5). In effect, the camera activating machine had usurped the spectator's capacity to synthesize a coherent experience from a particular sensory engagement with the world.

If *La Région Centrale* began where *The Man with a Movie Camera* ended, then *De La* began where *La Région Centrale* ended. The animation/automation of the

cameraman and animation/automation of the Camera/Eye lead to the animation and automation of a posthumanized viewer through a process of deicticification. But in contrast to *La Région Centrale*, this process was *distributive* in nature (four monitors as opposed to an experience generated frontally in the case of a single screen). Its "motor" was the camera activating machine and its looped program (one of three possible programs to be selected). Moreover, if *De La* referred to the "tripod" mechanism's origins in Vertov's film as much as it did to its origins in *La Région Centrale*, then, one could surmise that, in the case of these three works, the process of the viewer's experiential deicticification (one must not forget that the viewer was also doubly "split in two"—here/there, now/then—in the case of Vertov's film) would also be progressive over time and through media space, *as if the three works functioned as a single meta-rite of passage.* Finally, if Vertov's and Snow's films functioned, in different ways, as posthuman rite of passages, then it remains to be seen how *De La* relates to each film's ritual structure, content, and function. Once clarified it might be easier to delineate the meta-rite of passage in terms of which they might also operate.

De La's distinctiveness, as rite of passage, can be clearly visualized by mapping its basic ritual function through the structural deformations and displacements that it introduced into *The Man with a Movie Camera*'s basic rite of passage structure and process (Figures 7.2, 7.3, 7.4). The comparison reveals how Snow's

Figure 7.2 The structural deformation in a cinematic logic of production due to the automation of the tripod head. A basic cinematic rite of passage is reduced to a single stage when *De La*'s camera activating machine is functionally "aligned" with *The Man with a Movie Camera*'s stop motion camera/tripod animation. The camera activating machine's real time automation of image production has eliminated the need for a process-based product. The rite of passage is therefore reduced to a basic stage where images are perpetually produced/presented in real time.

Source: Based on Tomas (2007: 25).

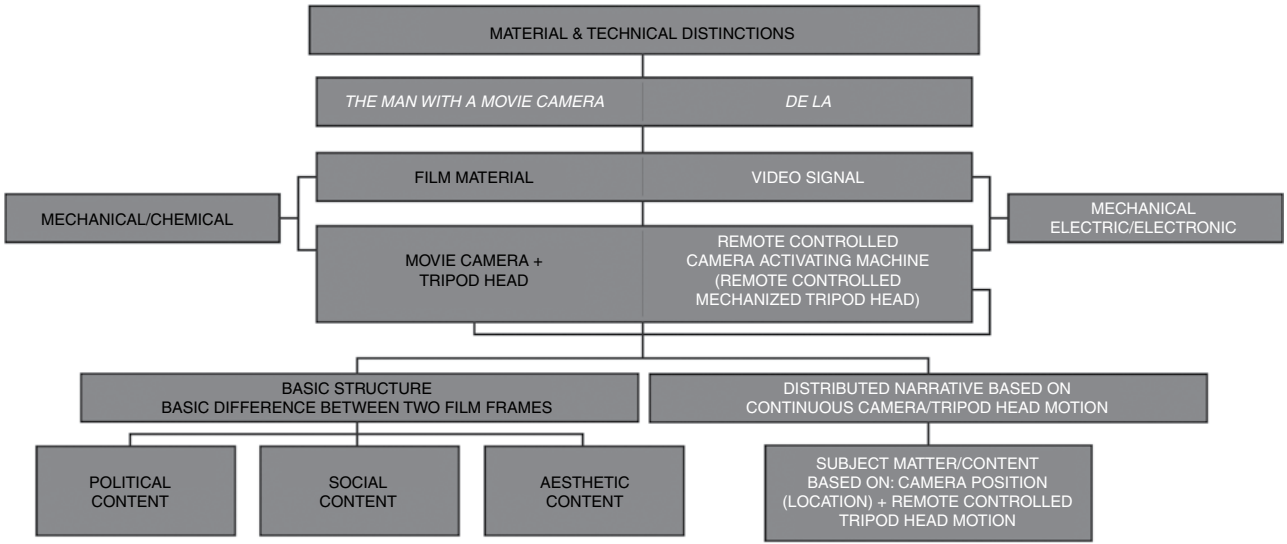

Figure 7.3 Basic comparison of *The Man with a Movie Camera* and *De La*.

Source: Based on Tomas (2007: 25).

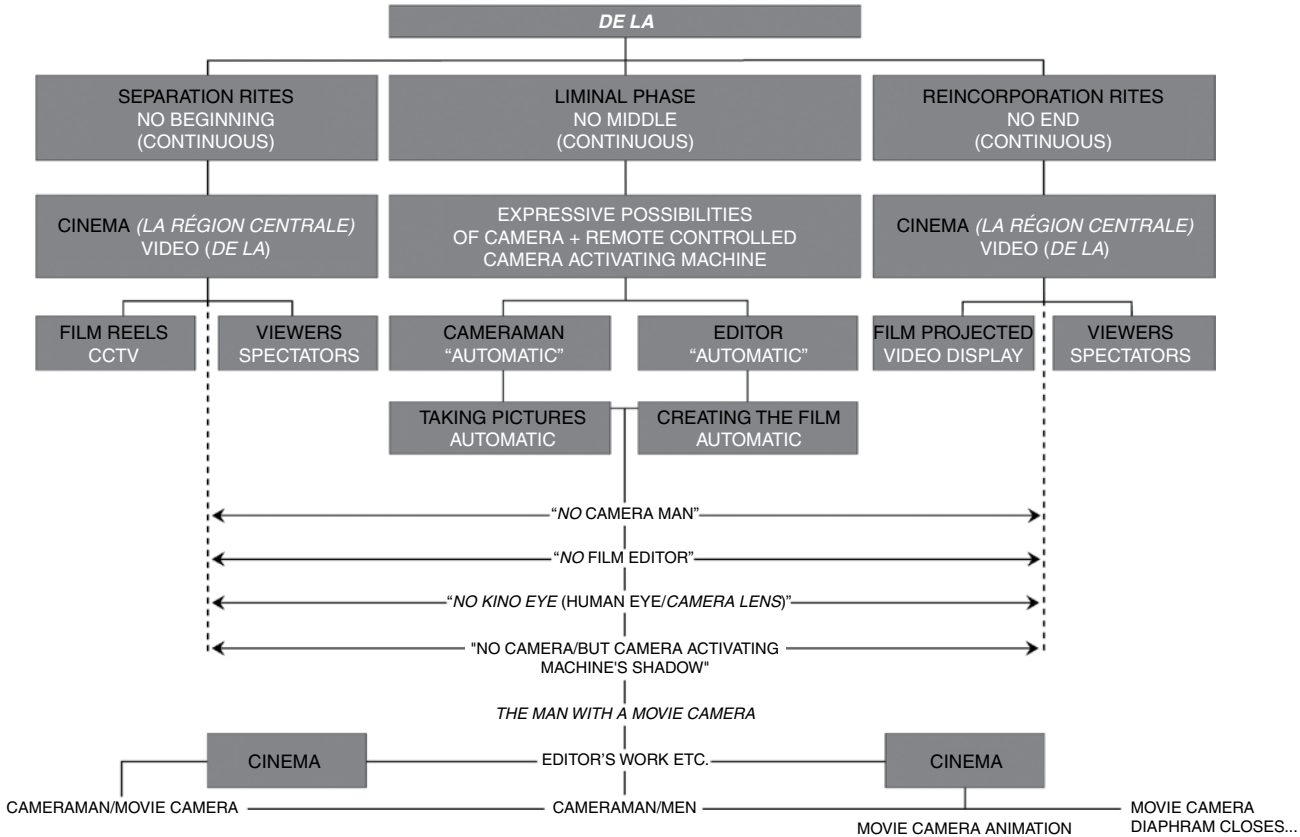

Figure 7.4 The impact of the processes of mechanization and automation associated with *The Man with a Movie Camera*, *La Région Centrale,* and *De La* on a basic rite of passage structure.

Source: Based on Tomas (2007: 26).

sculptural video installation represented a radical break with the thematic content and social implications of Vertov's earlier film. However, from another viewpoint, they can also be seen as a distillation and extension of Vertov's ultimate social and political objectives within the context of a different historical epoch. If the Russian filmmaker was interested in transforming/automating all of the human senses in order that they could exist beyond the boundaries of the human body, Snow was not just interested in the visual ↔ cosmic dimensions of machine vision and its transformative implications on human consciousness. His film also had a direct sensory/physiological impact on its viewers.[2]

Vision *and* sound. *La Région Centrale*'s and *De La*'s singularities as film or artwork were based specifically on the camera activating machine's capacity to automatically generate images under different environmental conditions. However, the images were complemented by auditory information (*La Région Centrale*) or the sound of the camera activating machine's motors (*De La*). Sound was therefore fundamental to the sensory experiences they produced, even though its role was ambiguous in both cases: either hard to identify its origins or nature, or else "natural" to the point of serving as a normalizing (in the case of the camera activating machine's motors) background to a powerful visual experience.

The specific relationship between *De La*'s consolidated and automated machine-based process of observation and Vertov's hierarchic social/observational method of film production can also be illustrated schematically (Figure 7.5, 7.6). While there is a general correspondence between observational systems in each case, their material and technical foundations are distinct, as are their respective contents. *De La* appears to be a product of a similar hierarchic production logic, but the basic stages of production that compose Vertov's method or kinomatic process of manufacture, and whose traces are clearly manifested in *The Man with a Movie Camera*, have been compressed through automation from four to two in Snow's video installation.

Finally, one can appreciate the social impact of the camera activating machine's semiautomatic process of *observation* when one maps it out in relation to Vertov's sophisticated technology of observation/manufacture (which, one must not forget, also operated under the command of an author/supervisor (Figure 7.5, 7.6). In contrast to Vertov's system of eye-camera lens in-frame montage analogies, animations and documentary insights into *The Man with a Movie Camera*'s process of production, *De La*'s exclusive machine-based system

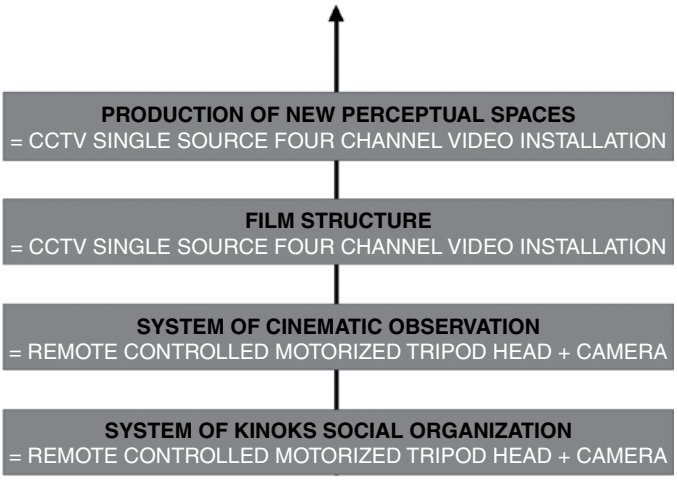

Figure 7.5 A comparison between Vertov's social/observational method of film manufacture and *De La*'s automatic machine-based process of continuous observation/image production. Based on Tomas (2007: 27).

of observation and its continuous process of image generation were automated, preprogrammed, and location-sensitive.

However, if *De La* was also a location-based video installation (as defined by the information it generated), its method of processing images and simultaneously projecting them in real time on four television monitors created a situation of representational identity-based experiential de- or dislocation within the environment in which it was situated.

De La was radical but not in the same way that *The Man with a Movie Camera* was. It was radical because of the way that it automated the movements of a cameraman including that of his head and eyes, the choices of the editor etc. It was also radical because of the way that it striped out predetermined forms of content (but obviously not all content) by simply replacing them with pure location-defined images (a form of automated content); and because of the way that it eliminated questions of culture, politics, and ultimately aesthetics in favor of the systemic operations and effects—even if ghostly effects—of mechanical logic, in particular that of an isolated element in film technology. Finally, it was radical because of the way that it reduced the narrative potential of a medium (film/video) *not* to the culture and spatial potential/logic of that medium (as in the case of Vertov's film) but, on the contrary, to the pure mechanical logic of an elementary yet key component in a process of automated image production: the tripod head.

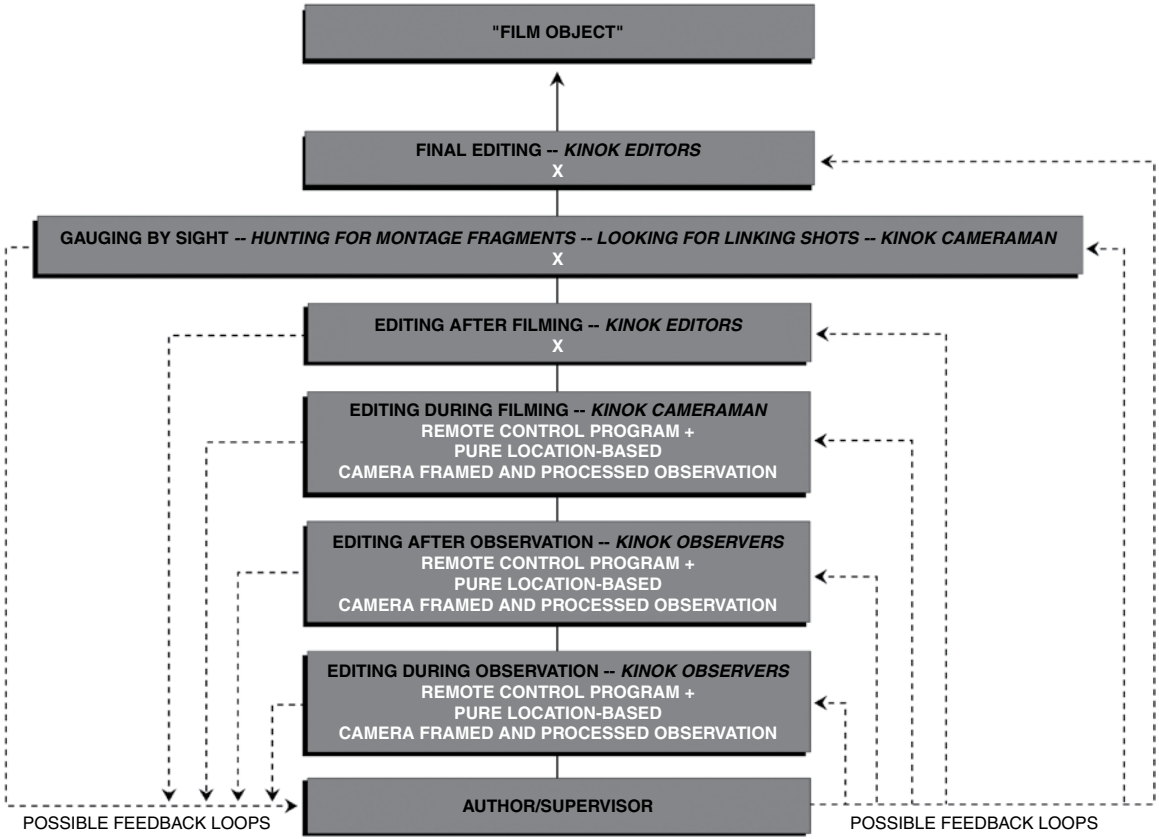

Figure 7.6 A comparison between the underlying socio-logic of Vertov's Kino-Eye system of observation/manufacture and *De La*'s automated process of observation-image production.

Source: Based on Tomas (2007: 27).

If Vertov's prophetic Kino-Eye metaphor, "Our eyes, spinning like propellers, take off into the future on the wings of hypothesis," could be also applied to *De La*, then it was not only literally as if the camera activating machine was a kind of prototype of an eye ball that had become airbound on the wings of its own hypothetical automony, but also because Snow's sculptural installation opened an interesting and historically significant channel of communication with the past *and* the future. As we shall see in the next chapter, the significance of Farocki's *Eye/Machine* trilogy and *Counter-Music*, in the context of this book, is that they explore and map an important threshold in the machine-based automation of vision *within a specific Vertovian lineage*, and they also point to a new stage in the evolution of a posthuman subject, a stage whose primary characteristic is that machines can function exclusively in terms of their own systems and languages and therefore without the intermediary of a human agent.

Part III

The Public Deployment of Machine Vision and the Programmed Materialization of the Posthuman in Collective Social Space, Two Early-Twenty-First Century Video Documents

Ever since video recorders have been available, filmmakers have begun to refer back to film history
— it is time for the rise of the lexicon.

Harun Farocki

8

A Posthuman Future in the Age of the Algorithm: Harun Farocki's Documentation of the Operational Image and its Culture of Surveillance

In this final chapter I will focus on two other rite of passage structures, which are different from the ones I have previously discussed. These others are implicated in Farocki's *Eye/Machine* trilogy (2001–3) and *Counter-Music* (2004). What is interesting in these video works, from the perspective of this book, is (a) their documentation of the recent history of machine vision and the machine-based image and, in particular, the emergence of the operational image in the context of a culture of surveillance and (b) the peculiar double offset frame within frame image structure that Farocki has adopted in the single-channel versions of *Eye/Machine I-III* and *Counter-Music*. While the former documentation exposes a new stage in the development of machine vision, the machine-based image, and their posthuman functions, the latter provides an insight into a new rite of passage structure through which this development has extended itself in the case of these two single channel video works. It also suggests a different concept of a "central region" and relationship to the Vertovian interval. Finally, Farocki's videos provide the final rite of reincorporation stage in a hypothetical rite of passage composed of Vertov's 1929 film, Snow's film and video installation, where the former can be considered to be a rite of separation and the latter a liminal phase (Figure 8.1). The relationship between the three filmmakers, and the works considered in this book, is not only based on machine vision, the machine-based image, the posthuman and a rite of passage ritual, the formal and operational statuses and functions of the frame and the interval also link Vertov and *The Man*

Eye/machine analogy Movie camera/tripod animation	->	Central region and its "cosmic" environment semiautomatic image production	->	Operational image
Cinema spectator (external)	->	Cinema spectator (internal: within the central region)	->	Machine "spectator" (internal: the machine is "conscious" of what it sees inasmuch as it "recognizes" and compares what it sees)
Inside cinema (IC)	->	Inside central region/Inside IC	->	"Inside machine"
RITE OF SEPARATION	->	LIMINAL PHASE	->	RITE OF REINCORPORATION

Figure 8.1 An articulated rite of passage based on a machine-based processing of the spectator in the cases of Vertov's, Snow's and Farocki's films.

with a Movie Camera, via Snow, *La Région Centrale* and *De La*, to Farocki's *Eye-Machine I-III* and *Counter-Music*. A rite of passage structure and its posthuman objectives bind the five works together relationally (as individual rite of passages) and also sequentially in one overall ritual process. This is what makes these works interesting and historically pertinent.

Where is the spectator for a new form of machine-based vision that is designed for internal "algorithmic consumption"? The answer, of course, is that it is the machine itself that is its own "spectator," technician, and manager—a radical reflexivity that signals the eclipse of the passive external consuming viewer. Snow's cosmic consciousness and Vertov's total sensorium have suffered an "evolutionary" mutation. The machine has internalized the spectator's capacity to choose and compare. It is now both the producer and consumer of its own images. It has attained a primitive internal stage of reflexive self-consciousness. How has this been achieved and what are its implications for the history mapped out in this book?

Harun Farocki concluded his 1981 article, "Shot/Countershot," with the remark that 50 years after the foundation of the Munich-based film journal *Filmkritik* ". . . it will be clearer than it is today that all the locations have been filmed to death and that it's no use trying to divide a location into two or a thousand" shots. This observation was followed by an unusual comment:

> I think that then the already long-buried genre of *Russenfilm*—the Russian films of the twenties—will gain fresh importance. In times of dire emergency one remembers Russia, just as in 1941. (Farocki 2001: 110, emphasis in the original)

The possibility of a return to this period in the history of film resonates today, in 2013, over 30 years after these words were written. It reverberates for two reasons. The first concerns the precarious state of independent film production in a world that seems increasingly saturated with images of all kinds, and where the function and status of each image is calculated in terms of short-term economic value and rapid obsolescence. Under these conditions of production, Farocki's reference to early Soviet film brings into sharp focus the question of a history of the image, its functions, economy and future possibilities as a medium for the communication and critical analysis of human activities. A similar question was raised in the 1960s and 1970s, when Farocki was producing his first films. This period also witnessed a return to Soviet films of the twenties, as in the case with the Groupe Dziga Vertov (1968–72), among others.[1] The second reason why Farocki's comment reverberates has to do with his work, methods, and his particular political/historical approach to filmmaking. The significance of early Soviet films becomes clearer when we realize that a history of images, conceived as the product and archive of machine-based activity and human physical/mental labor, is rooted in the technical, scientific, and political/economic intricacies of modernity. Hence the historical significance of *The Man with a Movie Camera* and Snow's film and sculptural installation. The reference therefore highlights two important aspects of Farocki's filmmaking practice: its roots in a reflexive form of media history and its ability to move between past and present in search of pertinent sources of information and models. This is a different approach to the question of machine vision, the machine-based image and their relationship to the posthuman from the ones proposed by Vertov and Snow. However, the reference also points to a common attitude between the Soviet filmmaker and Farocki: the ability, critically and inventively, to situate filmmaking activity in a contemporary frame of reference in order to critically analyze it within the context of an innovative kinomatic form.

Farocki's prophetic reference to early Soviet filmmaking is being confirmed at this time by the changing roles of the image as it rapidly extends its digital presence throughout the cultures of the world and is increasingly recalibrated for nonhuman, machine-based consumption. For these are the new conditions of existence for images produced by machines, and as used in the systems of observation that are being widely deployed to monitor and regulate collective life within and across cultures. It therefore seems appropriate to return to the history and functions of machine vision as represented by Vertov's *The Man with a Movie Camera*, Snow's *La Région Centrale* and *De La*, in the context of Farocki's *Eye/*

Machine trilogy (2001–3) and *Counter-Music* (2004), in order to chart machine vision's reflexive recalibration and its posthuman implications. For Vertov was the first filmmaker to explore film language's relationship to machine vision, and the more general position of moving picture technologies and production processes in an industrial society. He was also one of the first filmmakers to contribute to our understanding of the ways that machine-based observation can record human activity, and how this technology can ultimately be used to influence and regulate that activity. *La Région Centrale* and *De La* are situated between machine and electric paradigms and their sensory "environments" (to use McLuhan's term). Farocki, in contrast, has explored the recent history of machine vision, especially in relation to changing labor practices and the military/civilian deployment of intelligent machines. When their filmworks are compared, they reveal one of machine vision's more idiosyncratic historical trajectories while simultaneously suggesting anthropological methods for its analysis.

Brief return to *The Man with a Movie Camera* and its propositions concerning machine-based vision

As noted in Chapter 1, *The Man with a Movie Camera*, constantly and relentlessly tests its own perceptual, socio-representational and technological boundaries. Politically inspired montage-based observation, shooting and editing strategies explore the possibilities and social uses of machine-based vision, as defined by the movie camera's structure and capabilities. The result is a film that stands as an exemplary cultural artifact, the product of a particular—dialectical—method of thinking and revolutionary social consciousness, dedicated to the construction of a new Soviet society and reflexively conscious citizen.

However, one of *The Man with a Movie Camera*'s most interesting propositions, from Farocki's perspective, emerges from its analysis of filmmaking's place within an advanced industrial society. The investigation transforms the film into an early and extraordinarily rich example of a reflexive visual ethnography, one that not only openly acknowledges its own biases and constructedness, but one that can also be described as the first systemic analysis of the social/industrial basis of the machine-based visual process upon which it was based.

The Man with a Movie Camera presents a composite map of the interrelations between communications and transportations systems in a "simulated" early-twentieth-century metropolis, and places cinematic practice and its technologies within this infrastructure. The film links them together by way of formal and thematic associations, of movement and interaction that produce a virtual network of associative pathways, or conduits, between infrastructural systems, machines and mechanical processes. Systems of transportation and communication (from roads and railway lines to telephone switchboards) are linked to manufacturing processes (including those implicated in film production) through a chain of associations connecting the movements of elementary mechanical components on a range of machines, from locomotives to movie cameras. The sequences extend to people and behavior through the juxtaposition of basic mechanical movements with rhythms associated with work and leisure activities. Thus people and artifacts interrelate through multiple pathways of formal and thematic association/connection. The film suggests, moreover, that the infrastructural network linking film work with other forms of labor, industrial/manufacturing processes and machines represents a stage in the automation of machine vision, as well as a stage in the intersystemic collectivization of all the senses by way of machine prostheses. It is upon such a foundation that a general machine culture emerges and can serve as an incubator for a category of the posthuman. This radical proposition is articulated, as we have seen, at various moments in the film. Especially those that involve the graphic representation of sound, visual references to radio transmission, and various superimpositions of human eye and camera lens. The proposition is also evident in the startling movie camera/tripod animation sequence that serves to introduce the film's concluding phase: the representation, in a movie theater, of selected sequences from *The Man with a Movie Camera* in an euphoric, rhythmically accelerated mise en abyme presentation of its principal themes.

Strategies of observation and surveillance

The Man with a Movie Camera consists of a complex and detailed comparative analysis of the human activities that take place during a single day in the life of an unnamed cosmopolitan city. The film's images are associated with a cameraman who is documented as he films, walks, runs, or is transported by

automobile, fire engine, locomotive, tram, motorcycle, or crane in an ongoing search for thematic visual information. The analysis is produced in part by the cameraman, who is monitored by a second cameraman who is also periodically filmed; and (in part) by an editor who is shown manipulating and examining selected footage and constructing a film—the images of which can be traced back to the cameramen's labor. The inclusion of introductory and concluding sequences devoted to *The Man with a Movie Camera*'s public presentation in a cinema suggests, by association and transference, that not only the cameraman but also any spectator of this film is actually situated in two places at once; a paradox that reinforces the film's own special capacities of transportation/communication. As I have demonstrated in Chapter 1, *The Man with a Movie Camera* is a rite of passage. It stages a double social transformation of the human subject: Its first short-term objective is to produce a new Soviet citizen; its second long-term objective is to transform the human into the posthuman (as measured against the human eye/movie camera analogies, the camera animation sequence, and Vertov's ultimate multisensory panhuman political objectives). However, as is clear from the film, the limitations of Vertov's long-term (posthuman) objectives were determined, historically, by the machine paradigm through which he operated and in terms of which *The Man with a Movie Camera* was "manufactured." This is revealed most clearly in the film's material/symbolic optical superimpositions and fusions, and in the animated movie camera/tripod sequence where Vertov could have conceived the animation in electrical terms as opposed to mechanical ones, especially since his ultimate objective was directed to the production of an "electric man"—("*Our path leads through the poetry of machines, from the bungling citizen to the perfect electric man*" (Vertov "We: Variant of a Manifesto," 1984: 8, emphases in the original)). However, it is important to acknowledge that the mechanical reference is perfectly aligned to the mechanical nature of a 1920s movie camera, since it is this "machine" which is at the origin of *The Man with a Movie Camera,* the world it depicts and the propositions it advances concerning the future of a society, its culture and inhabitants.

Important sequences of the *The Man with a Movie Camera*'s comparative analysis reveal aspects of the camera and cameraman's behavior that point to some negative consequences of Vertov's panhuman machine-based utopia. It highlights one of the film's principal visual arguments concerning the movie camera's social and political uses: its ability to intrude, probe, survey, and record events of interest. This ability leads to another insight concerning filmmaking's

industrial foundations: the intimate relationship that can exist between machine vision and an intrusive observational economy that is based on an industrial culture and its infrastructure. This approach is quite different from the immersive one that was adopted by Snow in *La Région Centrale*, or the more "open" and reflexive aesthetically articulated strategy that he used for the presentation of the camera activating machine in *De La*—even though they are based, in principle, on an automatic environmental recording machine that shares a common observational function with the public use of CCTV surveillance cameras. *De La*, in particular, exposes its immediate public space to systemic scrutiny via the surveillance system at its center. The camera activating machine not only performatively "celebrates" its beauty as "artwork" and sculpture in the round, it introduces the spectator to its mode of operation, and the complex spatiotemporal nature of the visual language it has "mastered."

There are three basic sets of strategies to penetrate and dominate space in *The Man with a Movie Camera*. The first set is associated with a "panoptic" approach to observation. One strategy, in this set, is based on the cameraman's ability to exploit unusual aerial viewpoints created by buildings or industrial chimneys. Another strategy is explored through the use of trick and composite effects that celebrate the movie camera's ultimate capacity to observe, register, and dominate the totality of human activity. Visual metaphors of a colossal movie camera appear throughout the film, in situations where it is represented surveying and monitoring aspects of city life—traffic, crowds—from bird's eye viewpoints (Figure 8.2). In contrast to these "vertical" perspectives, there is another kind of panoptic vision that is "horizontally" deployed in tandem with the city's transportation/communication infrastructure. Here, the cameraman exploits a different set of possibilities, associated with the creation of lateral perspectives, to observe and record contemporary life.

The second set of strategies is related to the penetration of space. They are associated with a more "intimate" ethnographic mode of observation, dedicated to uncovering and recording positive or negative forms of social behavior. People sleeping or washing, marriage, divorce, birth and cemetery scenes, instances of grief, accidents are shown, as well as enclosed—often dangerous—industrial or mining locations in which workers are filmed in intimate or claustrophobic relationship to their machines or work sites. These strategies depend on the cameraman's mobility, and therefore on systems of transportation/communication. They can also be treated as extensions of a horizontal or laterally deployed panoptic system of observation.

Figure 8.2 *The Man with a Movie Camera*. The omnipresence of the movie camera surveying the activities of Soviet citizens. Kino-Eye as prototype for the organization of a "society of surveillance." See also Figure 1.13.

Figure 8.3 *The Man with a Movie Camera*. Woman disturbed by the intrusive presence of the movie camera, while sleeping on a bench. An example of the movie camera/cameraman's autocratic powers of intrusion into public spaces.

The third set of strategies is predicated on mobility—but not in relation to automobiles, motorcycles, or other public modes of transportation. They depend, in contrast, on the use of electrically based systems of communication, such as the telephone. These other systems were the products of a competing environmental paradigm, even though the two emerged in tandem with each other and interpenetrated with each other in many technical artifacts from the electric motor, electric telegraph to the telephone. They are the elements of a new paradigm of vision that *De La* and Farocki's *Eye/Machine* trilogy and *Counter-Music* represent and document.

The Man with a Movie Camera's observational strategies were harnessed to revolutionary change. However, this does not imply that they were free of aggressive, repressive, or even reactionary predispositions. Ambiguous and negative possibilities are highlighted in two brief encounters where the cameraman's presence actively disturbs his subject in a way that raises questions about his mode of operation. The first is the case of a woman who is disturbed while asleep on a public bench (Figure 8.3). The second involves an elderly woman who is almost injured by the cameraman's car as she crosses a street (Figure 8.4). In both cases, the intrusive presence of the cameraman actively threatens individuals, but the encounters are treated as if they are normal extensions or consequences of his activities. The intrusive and potentially aggressive behavior of the kinoks can be read differently depending on one's

Figure 8.4 *The Man with a Movie Camera*. Elderly woman crossing street is nearly knocked over by the cameraman's automobile.

political, social, or aesthetic allegiances. Nevertheless, with the hindsight provided by the expansion of surveillance technologies over the last 30 years, these encounters can be considered (in the context of the film's articulation of movie camera and urban/industrial infrastructures) as early manifestations of machine vision's autocratic powers.

Although automated machine vision can be traced back to the invention of photography, and beyond to the construction and use of perspective machines of various kinds, the two micro-events sensitize the contemporary viewer to a new form of observation, and expression of its powers.[2] This lies in the composition of Kino-Eye and its kinoks, who not only introduced a new dimension of action and motion in relation to cinematic—machine-based—observation, but who were also capable of promoting another network of material/symbolic/infrastructural associations through the intrinsic capacities of the recording machine that they carried.

The Man with a Movie Camera explores basic similarities between the movie camera and other phenomena in order to link and yet blur the boundaries between animate and inanimate, reality and representation, human and machine, productive and unproductive behavior. Similarities are forged through a range of visual juxtapositions: changing lenses and changing subject matter; the hand motion of cranking a movie camera and use of one's hand for other kinds of repetitive mechanical actions; the registering of the distinct viewpoints of camera and subject; the focus and blinking of the eyes/opening and closing window shutters versus the exploration of the relationship of lens focus and iris diaphragm manipulation on image definition, etc. These parallels echo the film's visual/associational arguments for the synthesis of film production and other forms of industrial work. They achieve a unique state of self-reflexive resonance in the eye/camera lens in-frame montage superimpositions that periodically punctuate the film; not only because of the futuristic proposition they advance,

but also because of the peculiar material/symbolic/historical synthesis that is produced through potential fusion.[3] One of the propositions advanced through a kinok engagement with the ordinary, often anonymous citizen, is the ubiquity of a mobile camera eye, especially one that is an element in a much larger observational system (Figure 8.5).

Although various forms of Camera/Eye correspondences materialize, or are suggested in sequences depicting film production, the ultimate expressions of mechanical anthropomorphism are presented in the movie camera animation and in the film's terminal human eye/movie camera lens superimposition. For these are the two moments that point most insistently toward the future, while acknowledging that, at this stage in its history, machine vision is still tied to the human body; as are the various strategies of machine-based observation, even if the end of this relationship is clearly anticipated in the film's concluding seconds. *The Man with a Movie Camera*'s promotion of machine vision is positive and celebratory: it unites sociopolitical and cultural dimensions and harnesses their viewpoints to a single objective—the illustration of the transformative powers of the Kino-Eye system of observation and manufacture, and the capacity of this system to further the objectives of the October Revolution. The film predicts the system's complete integration within a new kind of society, its ultimate synthesis with other recording and transmitting technologies such as sound recording and radio, and, as we have seen in Chapter 1, it signals a final mechanical transmutation of the human senses and consciousness.[4]

The film promotes an integrated observational economy through the links it establishes between methods of film production and systems of transportation/

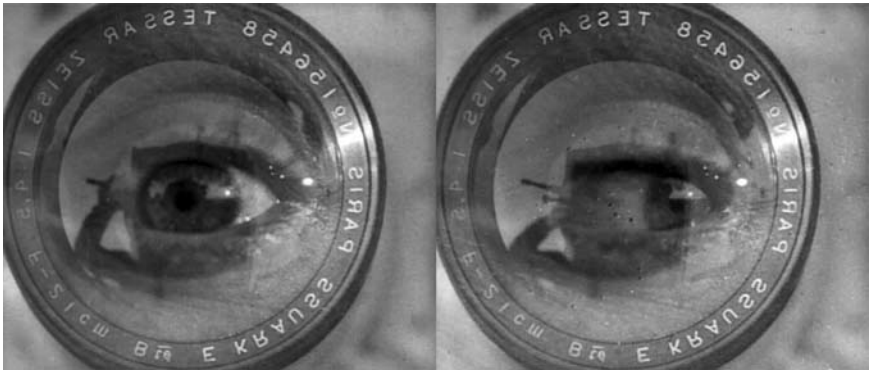

Figure 8.5 *The Man with a Movie Camera*. Two frames of the "camera-eye's" gaze from the woman sleeping on a bench film sequence (see Figure 8.3).

communication. The film also anticipates the economy's expansion and transformation into a form of machine vision that could travel backwards and forwards along all of society's conduits and pathways in a radical synthesis and machine-based extension of the human brain and senses. It is in these multiple ways that Vertov's film manifesto anticipates and embraces the logic and ethos of a society that is founded on techniques and technologies of surveillance (Wood 2006; Levin et al. 2002). *La Région Centrale* is an "experimental anomaly" in the context of this type of society—a "hole" in its culture and systems of surveillance. Although there is a kinship between the camera activating machine and the CCTV camera's pan/tilt surveillance functions, the omnidirectional view that it presents is subject to other laws than those of surveillance and its utilitarian parent society. Instead of the CCTV camera's primary function of policing public and private spaces, *La Région Centrale*'s movie camera mapped out an extraterrestrial relationship/zone with its parent culture and society—an embryonic world that could not be reduced to an existing industrial or postindustrial environment. Its existence was rendered possible through the network of ideas that combined together to animate the utopian projects of a counterculture and such new communications languages as were being developed and explored under the rubrics of "experimental film" or "expanded cinema." *De La* is less attached to *La Région Centrale*'s world. It belongs to that world and another future/present one. It celebrated not only the camera activating machine's "beautiful" sculptural form—a quality that was not featured in *La Région Centrale*, it promoted its observational dexterity: its ability to tirelessly and objectively survey its environment without the need of a human agent. With *De La*, the logic of surveillance enters the museum in the guise of a beautiful object. However, its sinister social functions were never deployed and could therefore never be criticized. Instead of displaying an intrusive form of observational behavior, *De La* displayed its performative deictic prowess. The actual description and analysis of the type of society that Vertov's film anticipated would only be provided 70 years after *The Man with a Movie Camera*'s release by another filmmaker whose work is not only shaped by the heightened political consciousness of the 1960s, but who has also chosen to investigate a similar observational/infrastructural matrix in search of a different answer to the question of the relationship between filmmaking practices, new forms of labor, advances in machine vision, and the future they anticipate.

Machine vision for the twenty-first century

Harun Farocki has been making films since the mid-1960s. He is one of a generation of filmmakers whose practice has been, and continues to be, shaped by this period of heightened political consciousness and sociocultural experimentation. Although Farocki's film production covers a wide range of topics from children's programs to experimental documentaries, and media from television to multi-channel video installations, his political approach to filmmaking is most clearly reflected in his choice of, and critical engagement with, a network of topics that serve as the sociopolitical matrix for the mechanically and electronically reproduced image. These topics include the history of human/machine relations, transforming labor practices, the history of machine vision, and the media's evolution and social uses.

The filmworks that bring Farocki closest to Vertov's preoccupations in *The Man with a Movie Camera* are the ones that explore the complex equation that exists between automated forms of industrial production, new labor practices, and the types of image recording and processing technologies implicated in these manufacturing processes. Videos that deal with these issues, like the trilogy *Eye/Machine I-III* (2001–3) and *Counter-Music* (2004), also question the shifting and ambiguous, often invisible boundaries of the military/civilian foundations of industrialization and their intimate relationship to the history of images.[5] Farocki's practice in these videos overlaps, or extends, Vertov's preoccupations, visual methods and strategies in two major ways; while it also allows one to recontextualize Snow's preoccupations and contributions to a history of machine vision and the posthuman subject within a late-twentieth-century culture of surveillance. First, in terms of their content—which complements, yet supplants, the culture of machine vision as presented in *The Man with a Movie Camera*. Second, in terms of form and the way that Farocki has chosen to construct the *Eye/Machine* trilogy and *Counter-Music* which, in the single-channel versions I am considering, link up in interesting ways with and extend Snow's use of video and single-channel delivery systems in *De La*. They can, moreover, be considered to be a radical development of the sequential single frame form of montage most closely associated with early-twentieth-century Soviet cinema. However, the use of sound and text-based information (both absent in *The Man with a Movie Camera*, and the latter absent in Snow's two works, with the exception of the Xs in *La Région Centrale*) are also important features of Farocki's practice in these works.[6]

The overlap between Farocki's videos and Vertov's film-manifesto is further complicated and enriched by the development of the electronic image, from television in the 1920s to video in the 1950s–1970s, and the progressive shift from analog to digital modes of processing, storing, and transmitting visual data following the invention of the charge-coupled device (CCD) in 1969. These developments have had a direct impact on filmmaking practice and the world it represents.[7]

Eye/Machine I-III and their propositions concerning machine vision

Eye/Machine, the first video in the trilogy, explores the features of a new kind of image—the operational image—as well as the material and social conditions surrounding its appearance. The video exhumes its logic and reveals its functions to place it finally in the history of images and practices. The operational image is the product of the development of a new generation of intelligent machines capable of performing tasks independently and automatically. Through its various roles, the operational image registers, maps, interacts with, controls and regulates the parameters of a new visual space that is the product of a new kind of nonhuman "vision": machine vision.[8] But the operational image belongs to a different machine culture and generation of image producing machine. For it is not necessarily visible to the human eye in the way that conventional images are.

Early industrial machines were designed to perform simple "single purpose" mechanical tasks in a system that included workers who contributed a minimum of mental power and labor. *Eye/Machine* describes the system's mechanical component as "blind" because of its inability to adapt automatically to unforeseen events and situations. The worker's presence added the necessary flexibility (and vision) to the system. *The Man with a Movie Camera* and *La Région Centrale* are reflexive products of this machine culture. However, the evolution toward the intelligent machine is accompanied by a progressive reduction of human presence. *De La*'s post-1972 presence in the National Gallery of Canada was a powerful, if unacknowledged, public testimonial to the progressive reduction of human presence in the world of machines and the gradual overturning of the hierarchic relationship between the mechanical and electrical in the machine culture of the mid-twentieth century: Although machine-based, Snow's camera

activating machine could only perform on the basis of electrical power: hence the obtrusive visual presence of an electrical "pipeline" in the *De La* installation (which also embodies video cables) and the deliberate eclipse of these cables during *La Région Centrale*'s production so as not to be recorded by the movie camera. Today, computer programs of various degrees of intelligence replace the human operator in complex automatic and robotic systems of manufacture.

Eye/Machine introduces its exploration of the nature and implications of the operational image with evidence of its widespread public dissemination during the 1990–1 Gulf War. The video presents examples of grainy black and white images produced by cameras mounted on military aircraft, laser-guided bombs, cruise missiles and surveillance drones that were also seen on television on a daily basis (Figure 8.6). The cameras not only documented target destruction but also functioned as the eyes in sophisticated guidance systems (Figure 8.7).

These purely instrumental images had no actively cultivated visual properties or aesthetic assets. The fascination they sponsored in a television audience resided in the logic and precision of the alien intelligence they served: its automatic and relentless capacity to navigate through space and time in order to attain its

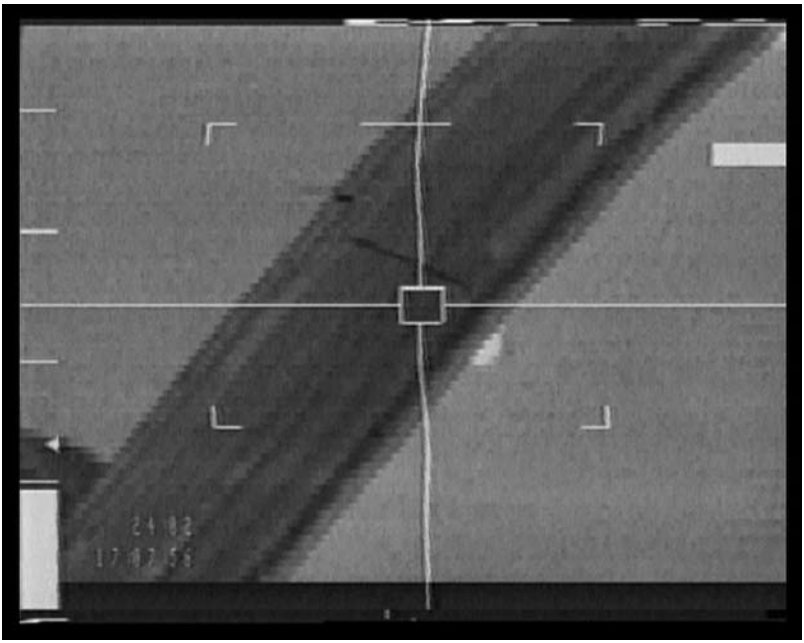

Figure 8.6 *Eye/Machine.* The smart bomb's eye. Photo: "Eye/Machine" © Harun Farocki, 2000.

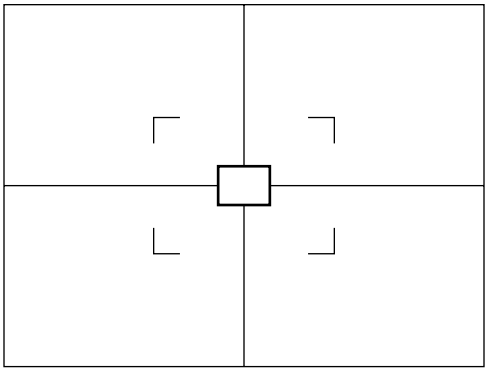

Figure 8.7 Laser guided smart bomb target guidance/target graphic.
(Note the presence of a "central region" which replicates the human eye's pupil.)

objectives, and the final seconds of transmission with its implacable premonition of impact, destruction, and death. *De La* finds a marginal place within this history, even though its functions and objectives were very different; and there is perhaps a premonitory echo of the final eclipse of one history of machine and image transmission in *La Région Centrale*'s apparently vacant geometric center and its final concluding seconds of pure light which echo, in an inverted fashion, *The Man with a Movie Camera*'s light excluding conclusion, the direct result of the *manual* closure of a movie camera's iris diaphragm. For *La Région Centrale*'s invisible control and command center was located somewhere else out of visual range (even if that "place," in the case of Michael Snow, was in the immediate vicinity of the camera activating machine). *La Région Centrale*'s intangible central location was according to its own spatial logic no longer governed by the basic binary classification system of human vision itself: Pure undifferentiating light in its case, or absolute undifferentiated darkness in the case of *The Man with a Movie Camera*'s conclusion. These two films' conclusions pointed to a representational world that might exist beyond the basic parameters of human vision.

Eye/Machine explores the relationship between operational images that are still produced for human consumption and a similar type of image produced by other intelligent machines controlled by computer programs. Brief intertitles remark that the disappearance of manual work also entails the elimination of visual work—a comment that reverberates throughout Farocki's handiwork because of its self-reflexive capacity to transmute *Eye/Machine* (as product of machine and manual labor) into an investigation of its own conditions of possibility and eventual extinction.

Operational images are products of visual tracking technologies designed to function without human intervention. Once activated, they discriminate automatically: they process and compare continuously until they reach an end. However, the world they visualize and interact with is predetermined—it is already calculated and archived. The shifting colored traces and outlines that seem to be alive with alien intelligence simply represent instances of machine-based recognition, the momentary creation of passages and correspondences between worlds. Intertitles capture the essence of this logic:

An algorithm compares the images taken—with stored geographical data (Intertitle, *Eye/Machine*).

The algorithm is an interface that defines both worlds simultaneously, and excludes all else as insubstantial because it is not anticipated in a program. The operational image represents a mutation in the logic of data acquisition and management based on the development of a new relationship between worlds, as computer models increasingly "replace"—overlay—significant sections of concrete reality. It also represents a significant augmentation in the penetrating powers of observation that can be measured through the proliferation of these models. Thus, in many instances there is, in *Eye/Machine*'s words, "no real need to invade foreign space in order to collect data" (Intertitle, *Eye/Machine*)—an observation that acknowledges the ultimate significance of the operational image in a new world order, where computer models have replaced reality and where their accuracy has become the measure of human achievement and progress.[9] *Eye/Machine* therefore functions as an introduction to a new kind of machine vision where there is no need of human intervention and therefore agency. In this world, the concept of the *visible* image—the image produced for the human eye—has mutated. If it exists, it is simply a by-product of a set of calculations which are the locus for the new immaterial numerical "image" (Farocki 2004: 184). To enter into this video's process of analysis, is to be *placed* in situation where one not only becomes aware of one's precariously place in a world dominated by machines, but one also becomes vaguely conscious of a looming threat of historical dedundancy. The video locates the viewer at the frontier of the posthuman algorithmic.

Eye/Machine raises an important question about the nature of machine vision in the age of intelligent machines, and its relationship to contemporary filmmaking practices. If we begin with the mediating (in-between) and comparative functions of these images, and also their definitive and exclusionary powers, then how are we to imagine a visual practice that can be reflexively parasitical, to become

critical in the way that *The Man with a Movie Camera* was, or *La Région Centrale* or *De La* were, to a lesser degree, in terms of their own historical context and paradigms of machine vision? *Eye/Machine*'s visual structure and its discussion of the image point to a different answer to this question.

Eye/Machine II continues to explore the issues raised in *Eye/Machine*. It reconsiders some of the earlier themes, repositions them, and contrasts them with new visual material. In this sense it functions as a liminal zone within the *Eye/Machine* trilogy, where cultural information is re-presented to the viewer in such a way as to intensify the process of critical reflection first triggered in *Eye/Machine*. Its clear pedagogical objective is to transform a passive viewer into a historically conscious one—a viewer who is aware of a powerful, yet invisible process of transformation that might implicate a hierarchic inversion of the traditional relationship between human beings and machines within the context of a history of labor practices and thus within society and culture in general. The video begins with a juxtaposition between old and new machines (the punch press and the cruise missile): icons of two histories (industrial and postindustrial), and two categories of machine ("blind" and "intelligent"), two forms of labor (human and automatic/programmable), and two worlds (civilian and military). The video goes on to explore different categories of operational image. One is represented by a predecessor: the 1942 German Henschel *Hs 293D* experimental television-guided bomb. Another is represented by computer simulation.

Eye/Machine II traces the emergence of distinct visions of the world—old and new, "real" and simulated, "proven" and artificial—in terms of a common method of articulation: image-processing software. But it also proposes that this method is at the origin of a third visual world of operational images, a world composed of simple geometric shapes: straight lines, arcs, corners—elements in a language of edges: a language that was also explored in different ways in *La Région Centrale* and *De La*. As in the case of Snow's film and video installation (and *The Man with a Movie Camera*), it is a *world that exists and is governed by the rectangular picture frame*. This world refers less to a "proven" reality than it does to computer models. The old world of machines, the world of the conventional movie camera, is rooted in the simple single purpose logic of the punch press, a logic reflected in the movie camera's elementary moving parts (its "claw" mechanism, rotary shutter, etc.) and in the sequential frame by frame production of a film. This is the world that produced *The Man with a Movie Camera* and *La Région Centrale*. The new world, in contrast, finds its

ideal expression in the autonomous electronic processing logic of the guidance system and its cybernetic capacity to constantly adjust its flight path. For *Eye/Machine II*, this logic signals "the end of the mechanical, single purpose machine" and its replacement by "flexible automation" (Intertitle, *Eye/Machine II*). This historical reality is in stark contrast to the kind of inflexible automation and single purpose machine culture represented by *De La*. *Eye/Machine's* earlier conclusion concerning the absence of manual and visual work is reconfirmed, reinforced, and projected into the immediate future in the form of an equation between rationalization and war: Are the two inextricably bound together? And concerning the exclusion of human presence: Will future wars occur in virtual space? By the time these possibilities have been enunciated, *Eye/Machine II* has already introduced the viewer to the elements of a "third" simulated world—that of the operational image and flexible automation—an algorithmic world generated by intelligent machines, thereby laying the foundations for critical reflection, understanding, communication, and perhaps, if not dedundancy, or transformation, then resistance (Figure 8.8).

Figure 8.8 *Eye/Machine II* "the end of the mechanical, single purpose machine." Photo: "Eye/Machine II" © Harun Farocki, 2002.

Eye/Machine III explores the residues of the human subject's working relationships with the new vision machines. The video does not explore programming, but begins instead with initial human input (calibration) in the case of the automatic laser sensing of objects (an aircraft wing and a bridge); a process that transforms three-dimensional data into numbers that can then be used for the virtual three-dimensional reconstruction of an object, whatever its size. In this sense the video begins with the problem of reading objects into a computer: transferring the real world into sequences of numbers that will eventually be used to create parallel virtual worlds. Thus it is through the new conditions of manufacturing—the novel status of the interface (the program), the automatic nature of work (laser scanning), and the receding presence of the worker and his/her changing functions (from production and basic calibration to management)—that *Eye/Machine III* again confronts the subject of work and machine vision. However, the video couples work and the electronic image in a slightly different way by returning to previous visual material in order to extract new information on the classification of the image types implicated in the labor activities associated with intelligent machines.

Using the example of a 1942 technical film on the V1 (*Vergeltungswaffe 1*) flying bomb, *Eye/Machine III* differentiates between promotional and technical, propaganda and operational images. The distinction involves images (such as technical animations) that illustrate a function (the V1's imaginary flight path) versus images produced by a camera for technicians who are trained to read their specialized data. Although both types of image are designed for specialists, their level of abstraction and their aesthetic qualities differ. It is in terms of these distinctions that the video returns to the question of the operational image and its special status. As the video reiterates, this type of image is not necessarily produced for human consumption and it might not represent a recognizable object. An operational image is produced, in the words of *Eye/Machine III*, when image elements are highlighted "to check whether they are part of a stored image" (Intertitle, *Eye/Machine III*). This more abstract category of ephemeral image is therefore not produced for human eyes but only for consumption by machines and their programs. The distinction is significant for the history of images because it marks a new stage where the image is no longer produced for human consumption. As if to reinforce the revolutionary status of the new image, the video also points out that "If such images possess beauty—this beauty is not calculated"—a remark that reverberates throughout the trilogy insofar as one of the distinct visual features of these videos is the

casual, yet subtle amplification of the operational image's ethereal beauty (Intertitle, *Eye/Machine III*).

Eye/Machine III returns to the question of cinema in the context of this new type of image when it proposes "cinematography by devices"—a cinema based on "images recorded by assembly robots"; a cinema whose images are "not really intended for human eyes (Figure 8.9)." Beyond the fact that this cinema would only (periodically) be "viewed by technicians . . . to check functioning," the statement seems to provoke, in the context of the video, a crisis in the filmmaker's craft and practice by revealing another stage in the history of cinema, defined by a new breed of spectator and spectacle (Intertitle, *Eye/Machine III*). At best, this stage is marked by the televisual transformation of domestic spaces into pseudo-technical zones, and residents into potential technicians. This was the case when cruise missile and related images were released for public consumption during the 1990–1 Gulf War. Then, the images were used to promote empathy and admiration, sentiments that were necessary for the uninhibited consumption of the models they embodied and, moreover,

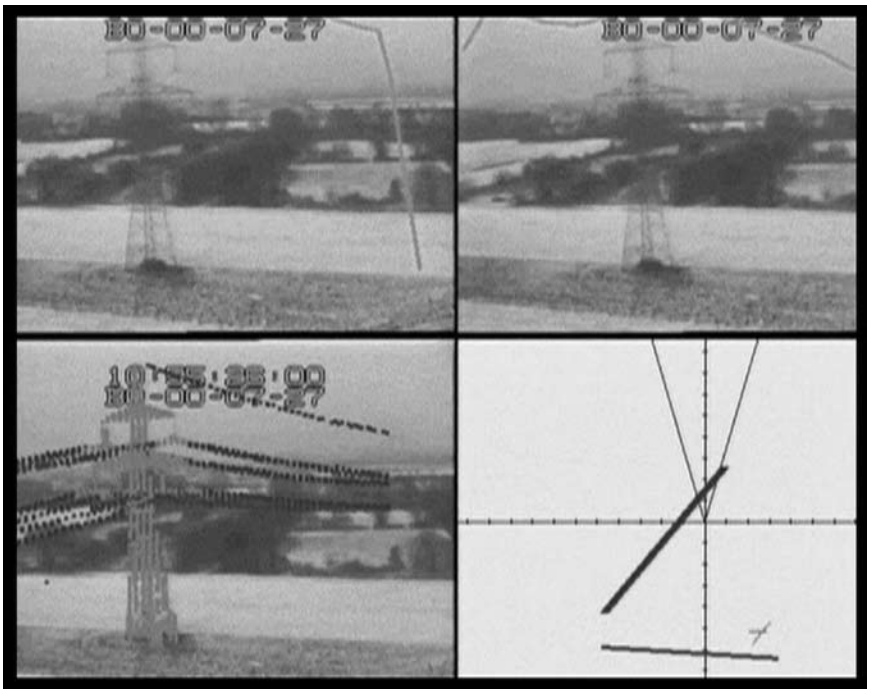

Figure 8.9 *Eye/Machine III*. A "cinematography by devices." Photo: "Eye/Machine III" © Harun Farocki, 2003.

the culture and strategies of surveillance and ultimately the international politics they represented. Domestic television therefore provided an efficient medium for the inconspicuous promotion of a new class of technicians and spectators for a new "cinematography by devices." Thus the viewer of the *Eye/Machine* trilogy is confronted with the product of the process traced out by this three-part work: a "cinematography by devices for devices." This conclusion resonates with *The Man with a Movie Camera*'s final rite of reincorporation, its ludic futuristic camera/tripod animation, and its reflextive return to the film's public context of presentation: the cinema. Now, however, its representational on-screen audience has been ingested by a language of algorithms and *The Man with a Movie Camera*'s real audience by machines, while the cinema itself has disappeared, dissimulated within the simulated operational world of algorithms and flexible automation. It is perhaps not surprising given the trajectory of the history of machine vision that Farocki has traced, and its extra-ordinary posthuman ending, that the ritual process articulated by the *Eye/Machine* triology should only operate at an intellectual level as opposed to an experiential one. For the rite of passage is, in this case, implicated in the trilogy's descriptive process which is intellectually apprehended (as opposed to viscerally or cognitively experienced). Although the process progressively excludes the human in favor of the posthuman, human initiands in the form of viewers are not processed in this trilogy, their method of replacement is plotted out historically and descriptively with the clinical objectivity of an anatomist who is dissecting a corpse for the benefit of surrounding students.

If *La Région Centrale* points surreptitiously to a new cinematography of devices, then *De La* does more than openly flaunt its visual power and the beauty of its machine aesthetic: it seduces the spectator and aesthetically draws "it" into its world in order to recalibrate its fragmentary image according to its own machine logic; and it presents its results in the form of an identical stream of images transmitted automatically and simultaneously to four television monitors in real time. The experience is almost devoid of human content (except for the fleeting impressions of spectators), if not human interest. The spectator's experience is intensified by the amplification of movements between machine and images distributed in space as the continuous flow of machine-based images interact with the sculptural machine and its camera/movements. Their consumption can result in a destabilization of habitual modes of perception that is nevertheless accompanied by an appreciation of the aesthetic beauty of this incessant fourfold flow. This experience, at the frontier of an intelligent

machine culture, is significant because of the postindustrial, posthuman model it vehiculates. Farocki's *Eye/Machine* trilogy's analysis reveals not just another perspective on a post-Vertovian, posthuman rite of passage, but its ultimate late-twentieth-century consequence. From the stage provided by the trilogy, one can contemplate a limited series of options: a posthuman future of cohabitation, radical transmutation, or gradual extinction. These scenarios are the hypothetical by-products of the *Eye/Machine* trilogy's analysis of the changing status of labor and its impact on a material history of images. These scenarios are also the outcome of the trilogy's rite of passage function which, as previously noted, is not experientally transformative but intellectually apprehended. The ritual process takes, in this case, a multilayered transformational form within a tripartite processual structure (see Figure 8.10).

The *Eye/Machine* trilogy explores the interrelations between a new generation of intelligent machine, war, and a new automatic imaging regime. It maps the regime's parameters in terms of the changing relationship between worker and machine, the machine and its product, and the emergence of a new kind of image that is created for nonhuman consumption. The quasi-documentary approach

INDUSTRIAL (Mechanically based)				POSTINDUSTRIAL (Electrically based)
single purpose machine (blind)	- >	program	- >	intelligent machine (adaptable)
production (inflexible automation)	- >	algorithm	- >	flexible automation
manual labor	- >	calibration	- >	management (technician)
real	- >	program	- >	simulated
analog	- >	program	- >	digital
human	- >	*algorithm*	- >	*intelligent machine/posthuman*
conventional image (including instrumental images for human consumption)	- >	*algorithm*	- >	*operational image (nonhuman, machine consumption)*
cinema for humans	- >	*algorithm*	- >	*cinematography by devices for devices*
Rite of Separation	- >	***Liminal Phase***	- >	***Rite of Reincorporation***
The Man with a Movie Camera La Région Centrale, De La				***Eye/Machine I-III***

Figure 8.10 A brief inventory of image types based on a history of machine vision and their relationship to a posthuman rite of passage.

of Farocki's trilogy, its focus on human/machine relations in the context of a new stage in the history of vision and the image, is congruent with Vertov's theoretical Kino-Eye project and some of the issues raised in *The Man with a Movie Camera*. However, the analysis presented in the trilogy lies beyond the political, social, and aesthetic parameters of Vertov's project, although it does not necessarily lie beyond the politics of the sensory transformation Vertov had projected in the case of Radio-Eye, and his dream of a total sensory transformation through the liberating powers of machines and mechanical representation. As Vertov declared in "We: Variant of a Manifesto" (1922): "*Our path leads through the poetry of machines, from the bungling citizen to the perfect electric man*" (Vertov: 1984: 8, emphases in the original). Farocki traces that trajectory into every home that contains a television and its potential to transform every inhabitant into a passive technician of the kind that one finds in laboratories and in control and command centers. *Counter-Music* explores the new logic associated with these centers and directly relates it back to Vertov's Kino-Eye project and *The Man with a Movie Camera*.

Counter-Music: The city, transportation systems, command centers, and contemporary strategies of surveillance

De La's automaticism, the aesthetics of its mechanical form, the elegance of its movements and its "totemic presence" point to its position at the threshold of a new "operational" regime of machine vision. But it belongs to the preceding one. Within the particular lineage that has been plotted out in this book, The *Eye/Machine* trilogy forms a rite of passage within a larger rite of passage composed of *The Man with a Movie Camera*, *La Région Centrale*, *De La*, *Eye/Machine I-III*, and *Counter-Music*. Farocki's films are articulated together within their own ritual process and also as a rite of reincorporation within a transhistorical meta-ritual. While one must remain cautious about a propensity to detect rite of passages everywhere, it is the processual, transformative and symbolic content of a particular tripartite structure that signals its ritual potential and possible sociocultural function. If Farocki's films exhibit a complex didactic function that governs the organization of visual material and a punctual use of intertitles to raise questions and highlight important issues, then there is a clear attempt to raise awareness with the objective of cultivating a critical historical consciousness about an important social transformation, in particular an invisible one in the

case of the operational image with all that this disclosure implies for the future of human labor and relationships with intelligent machines and their increasingly autonomous culture.

Farocki's *Eye/Machine* trilogy raises the specter of a new image regime that might be able to exist without human agency, and it suggests that this regime is the incubator for a distinct cinematography. It proposes, moreover, that a new kind of theater and projection apparatus already exists for this cinematography, and its spectators are currently being tutored (posthuman) internally and (human) externally. *Counter-Music* explores another type of movie theater—the centralized control center—that exists in association with the new regime and its infrastructure. For the moment this center is tangible. However, in the future it might no longer exist in a tangible and recognizable architectural form.

Counter-Music focuses on the problem of depicting another type of city whose infrastructure has been rationalized through the introduction of surveillance systems of various kinds. Lille—*Counter-Music*'s ostensible subject—is a key hub in the European TGV (Train à Grande Vitesse) system linking Paris, London, and Brussels. The portrait of this city opens with a question: "How to begin?" The answer that *Counter-Music* proposes is subtle and challenging. For it generates a critical and dynamic interface between the histories of experimental science, cinema, vision, the image and labor, thereby creating a visual work that is suspended between the history of film and the contemporary world of operational images. The interface produces a composite, network-based portrait of Lille, the reflection of a broader culture based on technologies of surveillance and the recent history of human/machine relations. The portrait mirrors, yet distorts, *The Man with a Movie Camera*'s "macro-infrastructural" model by tracing out another infrastructural dynamic based on new systems of surveillance, while nevertheless paying homage to this category of film and in particular Vertov's contribution to it.

Counter-Music's day begins in two places at once: Lille and *The Man with a Movie Camera*, thereby setting up a dialogue with its "double offset frame with frame" model (Figure 8.11). But daybreak in each location is already anchored in another environment: a sleep laboratory with its distant symbolic allusions to the darkened interior space of the cinema theater and the individual and collective dreams presented within its walls. The question of representation is immediately posed, diffracted and deconstructed through an inversion between the history of film and laboratory observation, cinematic representation, and medical data graph.

Figure 8.11 Fictions and unique prospects. Two modes of representation.
Photo: "Counter-Music" © Harun Farocki, 2004.

For Vertov and Kino-Eye, the existence of the image (as opposed to its reception) was predicated on production. In the case of the sleep laboratory, the image's conditions of existence are determined by reproduction (CCTV camera and medical data graph). However, the distinction between production and reproduction is caught in the paradox of a video that is itself constructed on a series of classic references to film history, networked with other references drawn from obscure archives. Production interfaces with reproduction, CCTV footage with film fragments, manual work with the "labor" practices of automatic machines, and representation with observation—the old tensions and contradictions of the *Eye/Machine* trilogy and *The Man with a Movie Camera* reappear and reverberate throughout *Counter-Music*'s basic visual structure. The drama of a modern city—its contemporaneousness, dynamism, fictions, and unique prospects—are disseminated/dissipated through a network of surveillance cameras; the filmmaker is reduced to watching, and waiting (for the moment when street lights are automatically switched on—another allusion to the cinema, its magic,

and the necessity to return to everyday routines), in a quest to produce visual statements that are the measure and countermeasure of the new observational systems that anonymously record everyday urban activity. Past and present, the history of cinema and contemporary filmmaking strategies, types of images, systems of observation, dimensions of objectivity, and the hidden presence of a matrix of surveillance are visually and sonically sounded and mapped. They are probed, juxtaposed, and tested by intertitles in order to expose the political and social implications of a basic network of observation and an unusual form of social activity—the production of images, without cameramen, whose fields of vision are remotely controlled from distant centers. This is, of course, the inverse of *La Région Centrale*'s systemic yet idiosyncratic mapping of a desolate Northern Quebec landscape or *De La*'s continuous monitoring of the institutional display environment of the National Gallery of Canada, its perpetual home. We are back in *The Man with a Movie Camera*'s real—but composite (montaged)—world but now 75 years in the future. *Counter-Music* is a feedback loop between the here and now and the there and then and the viewer's "I." Its frontal, albeit dualistic, mode of presentation, is transformed into a critical—comparative—binocular evoking "I." Information is presented, compared, replaced and compared again, and so on, as image sequences are subject to lateral comparison and dialogue. Montage through time/across space.

Counter-Music presents a visual ethnography of the machine vision matrix of a securely networked city. The techniques of observation that it uses are congruent with its subject as it taps into the anonymous spatial network of CCTV cameras, below and above ground, that transmit images in real time to control centers (Figure 8.12).[10] But the film couples this network with another one that contains other banks of images, and references to other histories and possible futures: *The Man with a Movie Camera*; *Berlin, Symphony of a Great City* (Berlin: *Die Sinfonie der Großstadt*, Walter Ruttmann 1927); *Fantastic Voyage* (Richard Fleischer 1966).[11] These images are juxtaposed with the pictures of the mundane activities of bored inhabitants, the mute activities of a new breed of technician, and the fleeting passage of anonymous people who are silently, invisibly tracked and occasionally highlighted by operational images.

Counter-Music traces a contemporary history of the indistinguishable virtual citizens of a generic posthuman Metropolis. A history created by computer programs and presented on electronic screens, monitored by the equally anonymous technicians of a new visual culture, in womb-like control and command centers. This is the new system of Eye/Machine that has replaced

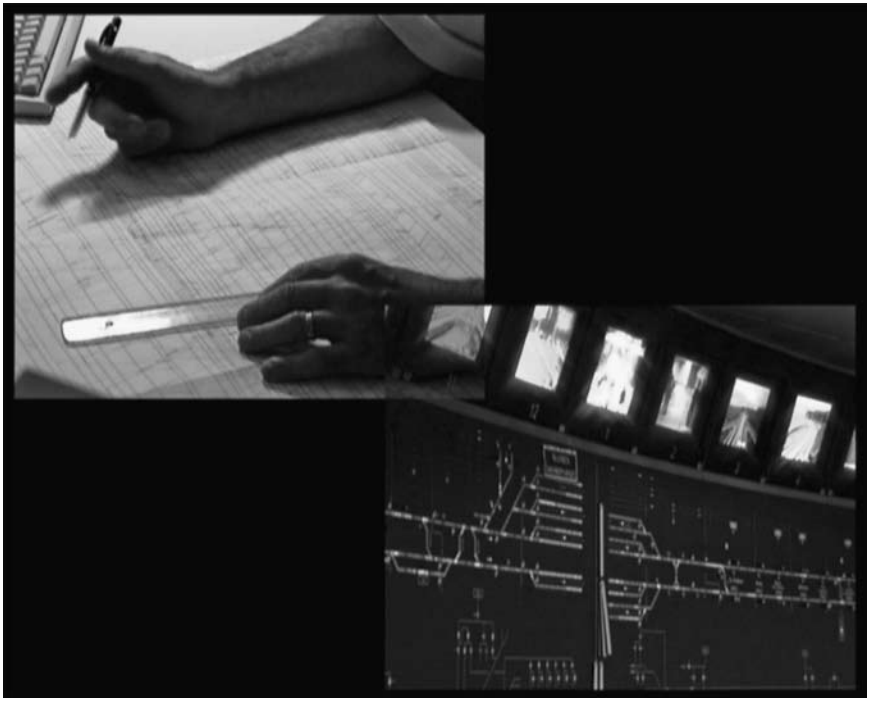

Figure 8.12 A control and command center. Photo: "Counter-Music" © Harun Farocki, 2004.

Kino-Eye, the kinoks, and the workers who are emblematically represented in *The Man with a Movie Camera*. The viewer can suddenly become aware that he or she is living in a world that not only does not correspond to the one that exists for the everyday citizen, but that this citizen—the subject of the "I" that is watching *Counter-Music*—has no recognizable subjectivity. Recognition passes through a process of objectification which ensures that, from the viewpoint of the new image culture and its technicians, the individual is transformed into a statistical algorithmic cipher whose only presence, if one can call it that, is signified by a periodic highlighting ritual. Indeed, it is hard to image that Vertov could have dreamed of these virtual citizens inhabiting his generic Metropolis. The people the inhabit his film still retain their individuality even when faced with the probing eyes of the kinoks. Even Kino-Eye's sophisticated and proactive observational/manufacturing system is no match for the banks of computer programs and the thousands of anonymous CCTV cameras that passively monitor contemporary cities today (Figure 8.13). Indeed, compared to the new

Figure 8.13 "How to begin?" Farocki's juxtaposition of a surveillance camera and editing room raises complex historical and political questions for the filmmaker and viewer. Photo: "Counter-Music" © Harun Farocki, 2004.

bunker-based cinematography, Kino-Eye is still an attractive model of a flexible, critical, revolutionary practice, and one can imagine an updated version of the kinoks operating in the manner of "flashmob" units whose objective would be linked to the disruption and "documentation" of routine public activities: a reflexive ethnography of public disturbance.

A new cinematographic counter-practice?

Earlier I briefly raised the question of the possibility of a parasitic and critical practice that could be the measure of the new visual culture exposed in the *Eye/Machine* trilogy. The answer to this question lies within the different dimensions of experience and the different environment in which Farocki's films were produced and in which they function, since his work is now also presented in museum and gallery settings (Figure 8.14). A clue to these differences is to be

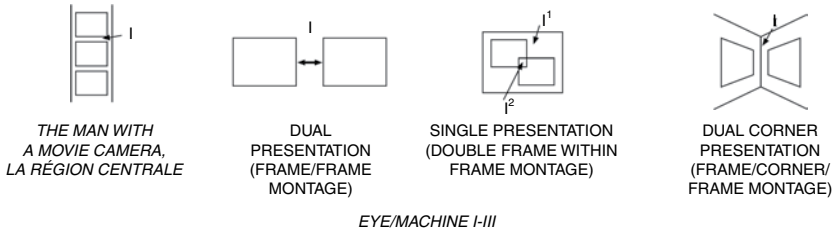

Figure 8.14 Visual options for the institutional presentation of *Eye/Machine I, II, III* and *Counter-Music.* Different modes of presentation rearticulate the concept/function of the physical interval in terms of alternative display strategy potentials.

found in the common visual structures of the single-channel versions of the *Eye/Machine* trilogy and *Counter-Music*.

Although Kino-Eye was not designed in the image of the kind of centralized control and command center that appears in *Counter-Music*, it was conceived to operate as an integrated hierarchical system of observation/manufacture.[12] Each kinok was also conceived, as we have seen in Chapter 1, as a prototype cyborg unit (where movie camera and cameraman were loosely coupled and integrated through a human eye-viewfinder liaison). This observation/manufacturing system is in many ways more complex than a simple command center, and its kinok elements were more flexible than an intelligent machine because of their mobility, independent decision-making capacities, and adaptable revolutionary sociopolitical objectives.[13]

Farocki's relationship to Vertov's film and practice is more ambiguous because of his use of "researchers" and archival footage from the histories of various categories of film (technical, scientific, or Hollywood fiction), and sound (ambient, documentary and voice over).[14] Contrary to Vertov, in the case of *The Man with a Movie Camera*, he also uses intertitles (caption-like but information, commentary, and question-based).[15] These methods of working divide and fragment the video's labor process and reading in terms of different sources and media. Moreover, the offset split frame within single frame structure that Farocki adopts in the single channel versions of *Eye/Machine I-III* and *Counter-Music*, with their additional text/image dynamic, adds a dimension of complexity that is absent in Vertov's film, even if there are moments in the latter when the frame structure is complicated by direct references to the film strip, individual film frame, editing table, or movie theater projection screen. On the one hand, Farocki's offset binary frame within frame structure refers back to the basic frame structure of film, and through it to the history and discipline of filmmaking,

especially in relation to editing and montage.[16] This approach distinguishes Farocki's methodology from Snow's antimontage-based approach in *La Région Centrale* and *De La* (although one can argue that the use of four monitors in the latter case transforms sequential frame-based montage into a complex location- , montage-based spatial practice, without however the critical dialogue produced by the simultaneous visual interaction/dialogue between different images). It is also a public form of dislocated, lateral splice. On the other hand, it also refers to the way documents are organized and compared on a computer screen, which in turn points to the working practices in a contemporary editing suite where images are constantly brought together and compared on different monitors.[17] Although the use of multiple monitors is integral to *De La*'s comparative visual logic, its source is not the editing room or computer screen but rather the spatial tradition of installation art.

The computer screen's desktop metaphor and file-based system of visual organization, where information can be managed and compared in terms of its multiple sources, is an appropriate model for the way Farocki manages and presents information in the *Eye/Machine* trilogy and *Counter-Music*.[18] Each image is always structured in terms of, and compared to, another image or intertitle in left-right offset assembly or splice and dynamically changing sequence of associations (as opposed to the purely sequential series of correlations and associations of a film like *The Man with a Movie Camera*, no matter how complex or reflexive its editing structure, or *La Région Centrale* with its phenomenologically geared linear antimontage knowledge paradigm). Farocki's split screen within a screen structure creates a different kind of machine vision and new infrastructure for a counter-practice that can simultaneously present and destabilize image-based information. It can even be used as a micro rite of passage model in its own right—an oscillating [frame/"non-space" [frame/liminal zone/frame] "non-space"/frame] visual structure—or as a schema of the historical frame within frame evolution of machine vision itself in the case of the trajectory and lineage traced out in this book—a diagrammatic form that also sheds light on the existence of another *éminence grise*: a common "central region" that finally, under different forms, unites all the works discussed in this book (see Figures 8.15 and 8.16). In the 1999 interview "Nine Minutes in the Yard," Farocki refers to this process of destabilization, in the case of electronic images, in different, less dramatic terms and traces its roots to video editing: "There, you are dealing with two images! On the right is the edited image; on the left, the next image to be added on. The right image makes a demand, but

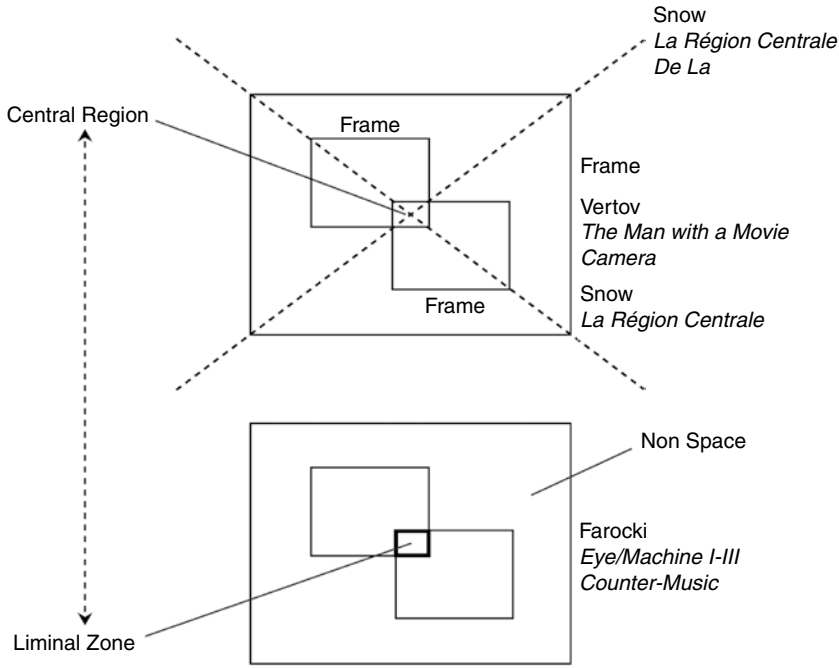

Figure 8.15 The significance of *La Région Centrale*'s X intervals and representational/locational reflex as a function of Farocki's double offset frame within frame montage structure, and the latter's possible relationship to an oscillating frame by frame bound micro rite of passage.

is also being criticized by the left one, sometimes even condemned. . . . It's a matter of 'soft' montage. One image doesn't take the place of the previous one, but supplements it, re-evaluates it, balances it" (Farocki 2004: 302). However, the term "destabilize" also provides a pertinent tool of evaluation, in this case, because of the way that its meaning incorporates references to a structured state, a process of questioning, its consequences, and the temporality that is implied in this process when displaced (in space) and over time. Soft montage is closer in its spatial logic to *De La*'s use of multiple monitors, but it also differs substantially from it because of the absence of independent, real time location-based images, not to mention their very different sources (Figure 8.16).

It is as if the strategies of Vertovian montage were updated and spatialized within the conceptual and visual space of the individual film frame; where Vertov's "theory of the interval" finds a new articulation; and where the metaphor of the Camera/Eye is projected beyond the boundaries of the camera body and kinok

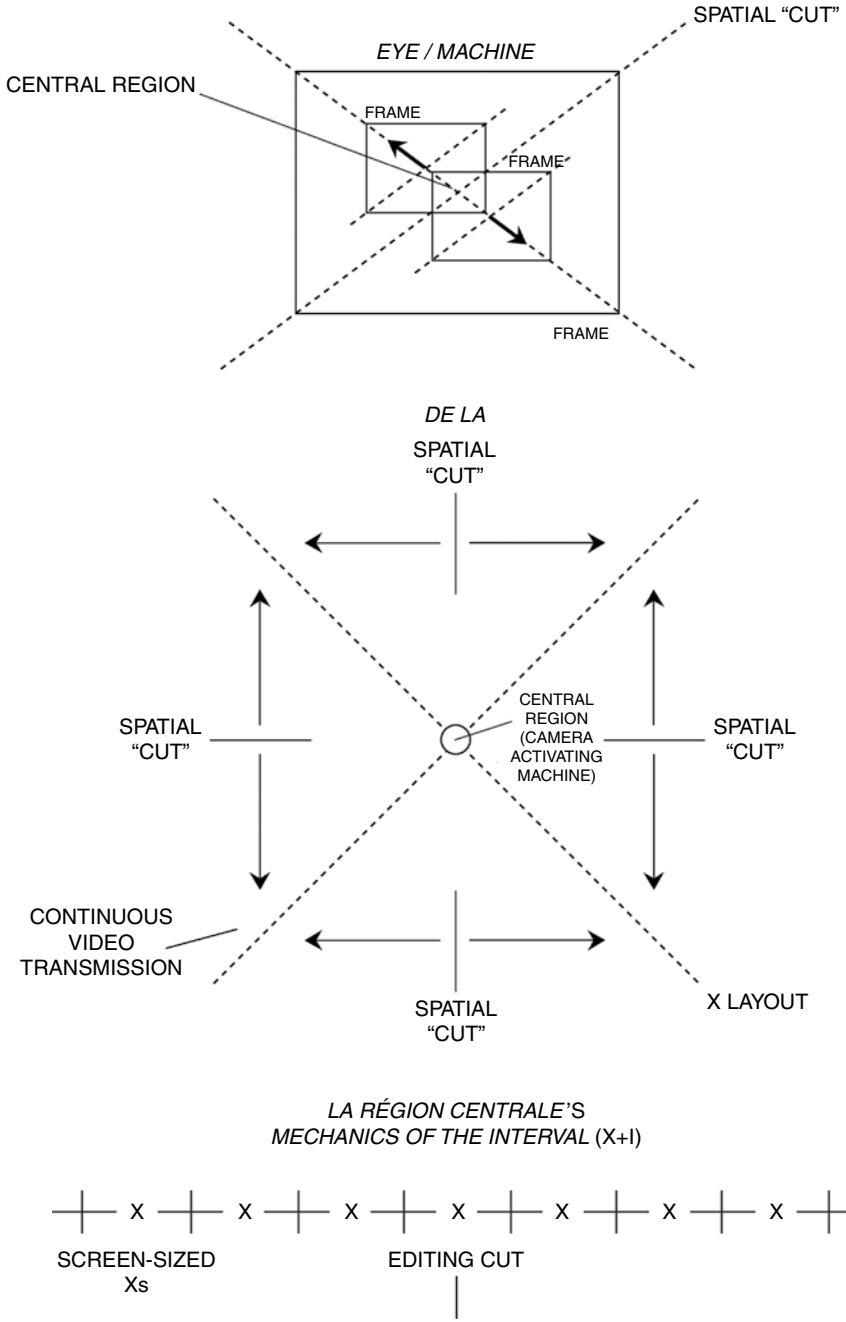

Figure 8.16 Film versus "real time" video installation space: *La Région Centrale*'s and *De La*'s differing logics of the interval compared to Farocki's "soft montage."

unit. As the camera eye divides and doubles, two viewpoints emerge from one, and the viewpoints are projected onto a new kind of editing table where images can be, in theory, shuffled and rethought in relation to one another.[19] This kind of logic places the viewer in the position of a reflexive, thinking subject whose consciousness is constantly being challenged with new comparative information. Although Farocki guides the viewer through a history of machine vision, as opposed to actively "processing" the viewer (Vertov) or "immersing" her/him (Snow); he *leads* the viewer, but he also treats the viewer as a historically conscious agent who is capable, under the appropriate circumstances of attaining a critical historical self-awareness. Clearly Vertov and Snow were equally respectful of the viewer's capacity to assimilate multiple types of information about the world in a critical comparative fashion. (Seen for this viewpoint, *De La* is an exemplary distributed form of information processing machine.) But their objectives were different. They sought, in one way or another, to *transform* the viewer, and the structure they inadvertently adopted suggests that this transformation was of a profound bio-historical order. Farocki comes to the same conclusion but from a more didactic, archive-based historical point of view. His use of intertitles is suggestive of a pedagogic objective. They also serve as intervals that, on the one hand, "punctuate" an image sequence and, on the other hand, comment on another image/sequence in the manner of a caption. In the former case, they correspond, in their reflexive defamiliarizing *formal* function, to Snow's Xs in *La Région Centrale*.

Farocki does not explore the film/video camera's possibilities as Vertov did in *The Man with a Movie Camera* or as Snow did in *La Région Centrale* and *De La*. Instead, he explores the logic, culture, and politics of the movie camera's historical and technological extensions (CCTV camera, computer program) in the world of machines and in urban and domestic spaces. If Vertov proposed a prosthetic extension of the human body and an ultimate technical transmutation of its sensory apparatus, and Snow pointed to the transformative cosmic-bio/sensory possibilities (a new sense of individualized cosmic location) and transformative physiological potentials of automated camera movement (such as dizziness or fainting), then Farocki traces another mutation, beyond the anthropomorphic and mechanical, into an abstract computational space where an algorithm operates like Maxwell's demon in an endgame scenario between categories of representation, and stages in the history of the image, the human and posthuman.

Finally, *Counter-Music* answers some fundamental questions about contemporary labor practices. What is the relationship between production and reproduction?

Which one is the most efficient representative of a new visual regime that is a symptom of a fundamental transformation in human/machine relationships? While Vertov still operated within a nineteenth-century logic of production and labor practices, as Snow did and Farocki still does, the latter's films are designed to function as sophisticated late-twentieth-century witnesses to the emergence of a new regime of *reproduction*. Farocki's videos do not immerse the viewer in a visual experience, they bear witness to the viewer's invisible transformation into a posthuman cipher where there is no possibility of individual agency or sensory autonomy. Vertov and Snow registered the gradual emergence of this new regime at different historical moments and in terms of distinctive historical criteria and objectives. They too raised similar questions in their own different ways; and their unique replies, in the form of the works they produced, marked important stages in development and analysis of this new posthuman visual regime, the mutation that the instrumental and operational image epitomizes, and the underlying transformations of the human subject that it embodies.

How are we to position ourselves in relation to our personal and collective histories? How are we to act on the world in a positive and constructive fashion? Farocki sidesteps the questions because he does not opt for one or the other. Instead, he projects them back to where they belong: in the history of labor and the interactions of workers, machines, and images; where patterns of human activity have always forged history.

Farocki's anonymous camera/operator and its vision machine no longer intrude into different social spaces to monitor human behavior in the direct way that the kinoks did. Kino-Eye's camera strategies have been subject to historical and formal mutation. Farocki's practice is based on another type of intrusion and another kind of observation. This practice is modeled on the operational image and it functions through an equation of distance that mirrors machine vision's methods of operating between worlds. Each video mimics a centralized command center as each source or reference leads back to a contemporary location or a recent or distant historical moment.[20] But each video also functions like an algorithm that is designed to compare and highlight common patterns of data (information) between past and present in a way that transforms each image into a renegrade meta-operational image, one that has now been permeated and appropriated by history and politics, social significance, and representational identity. Moreover, from either perspective (command center or operational image), each video is also conceived as a third transcultural space where history can be constantly used to question the nature and social functions of film:

"Whether it is that which is seen as a whole at a screening or that which one can read from it at the editing table when isolating its elements" (Farocki 2001: 106). This question can also be detected in *The Man with a Movie Camera*'s oscillation between the site of the film's public presentation, and the work of the cameraman and the editor. The question, in both cases, is finely balanced between production and reproduction, manual labor, and automatic display. If in Farocki's case this question is answered in terms of the analytic power of contemporary film practice, through the dualistic sequential dynamics of shifting images, intertitles and sound; intelligent machines, operational images and centralized command and control centers point to another future. That immanent future is machine-based and operationally posthuman.

Notes

Introduction

1 See, for example, this 1967 poem by Chris Marker reproduced in Alter (2006: 135–6):

Let Us Praise Dziga Vertov

Let us praise Dziga Vertov
for if I had to choose the Ten Best Documentaries of All Time
i'd call it preposterous
but if there's ONE to choose:
"A SIXTH OF THE WORLD"
Because this moment of our history, this palingenesis,
this dawn, this birth of our memory,
this first draft of what was due to be our world,
    good and bad,
    Pautovsky made us think of it
    Eisenstein made us dream of it
    but only one man made us SEE it
    DZIGA VERTOV
KINO GLAZ Film Eye Eye First
Camera Eye But Man's Eye (you SEE what I MEAN)
Camera, machine, montage, eyes, like hounds at Harry's heels
(O for a Muse of light . . .)
but the Eye über alles, the Eye leading the pack
seeing—donner à voir
and not only the faces, the gestures, the segments of life
but words also, words suddenly alive
by filling the whole screen, heavy words, real words,
(and the magic of the cyrillic, of course, but who's
complainin'?)
Words coming to a new stage of perception
owing to these large, big BLOCKletters,

    words achieving equality with images
    ideas achieving equality with facts
    art achieving equality with life

How d'you say that in Russian ?
DZIGA VERTOV

Chapter 1

1 See also Vertov's 1928 statement "The Man with a Movie Camera" (Vertov 1984: 82–5) and a March 19, 1928, film proposal for "The Man with a Movie Camera (A Visual Symphony)" (283–9). Mikhail Kaufman's 1979 *October* interview contains interesting information on the production of *The Man with a Movie Camera*, in particular in relation to camera design and shooting techniques (1979: 63–5, 66–9). For a discussion of the social, political, and artistic backgrounds to Vertov's work and its relationship to postrevolutionary Russian culture see Crofts and Rose (1977: 9–58); (Mayne 1977); Michelson (1984: xv–lxi, Introduction); Petrić (1987), in particular Chapter 1; Tsivian (2004), the collection of essays in *October*, 121 (Summer 2007) devoted to Vertov and his work; Levenson (2010). For a brief 1970s introduction to Vertov and cinema vérité see Issari and Paul (1979: 23–33). An extensive formal analysis of *The Man with a Movie Camera* can be found in Petrić (1987), other analyses are contained in Crofts and Rose (1977); Feldman (1979: 98–110); and Sauzier (1985). Vertov's relationship to new media is noted in Manovich (2001). For cinemetrics analyses see Heftberger et al. (2009) and Manovich (2013).

2 Cf. Vertov, "From Kino-Eye to Radio-Eye (1929)," (1984: 87):

Kino-eye = kino-seeing (I see through the camera) + kino-writing (I write on film with the camera) + kino-organization (I edit).
The kino-eye method is the scientifically experimental method of exploring the visible world—

a. based on the systematic recording on film of facts from life;
b. based on the systematic organization of the documentary material recorded on film.

Thus, kino-eye is not only the name of a group of film workers. Not only the name of a film . . . And not merely some so-called artistic trend (left or right). Kino-eye is an ever-growing movement for influence through facts as opposed to influence through fiction, no matter how strong the imprint of fiction.

3 For a description of the film's rhetorically based cinematic language see Annette Michelson (1972: 66–7, 69).

4 In addition to the vignettes in *The Man with a Movie Camera* see, for example, *Three Songs of Lenin* (1934). For a discussion of this film see Michelson (1990).

5 This chapter attempts to forge a "third" way between treating the film as a formal artifact (Petrić) or product of a specific historical context (Michelson 1984) and to

situate the film within a more general panhuman context which nevertheless takes account of its formal, symbolic, and historical specificities. In this sense, it is a preliminary analysis and should be treated as such.

6 See for example, the classic works of Van Gennep (1960); Turner (1970, 1977); and Richards (1982).

7 See, for example, Richards (1982: 60–111, 55).

8 Universities have a similar, yet diversified function in Western and non-Western societies through their ability to provide an independent space to receive and process all forms of knowledge and to engage with their implications and possibilities over extended periods of time (2–6 +/– years depending on the field and country). They are, from this viewpoint, liminal sites bracketed by rituals of separation and reincorporation that are designed to transform an uninitiated or socially "unproductive" adolescent member of society into a productive adult. These primary social institutions can be considered to be exemplary rites of passages because of the type and range of knowledge they disseminate under the broad categories of the humanities, arts, sciences, engineering, and medicine, etc. However, they are not isolated, but are the final stage in an extended educational process that now begins in many societies with systemic, institutionalized forms of preschool education.

9 One notes in this connection the relative spatial compactness of the university as defined by its campus(es) versus the length of time that it "officially" takes to complete a degree or a complete cycle of degrees.

10 These observations also apply to digital systems of pictorial reproduction even though they are no longer "wet processes" (i.e. dark room and chemically based). They are still optically mediated processes of image production, although the "development" process is no longer the same. The digital camera is capable of producing an instant positive image in electronic form; and the computer and its programs have taken the place of the darkroom, with a printer often functioning as a rite of reincorporation.

11 An important and influential example of a globally integrated digital imaging system is Google Earth with its claim to "Get the world's geographic information at your fingertips" through its capacity to allow its user to "Take a virtual journey to any location in the world. Explore 3D buildings, imagery, and terrain. Find cities, places and local businesses." www.google.com/earth/index.html. Accessed 19/2/13.

12 See, for example, Tomas (1988a and b) on the Judeo-Christian foundations of a photographic rite of passage.

13 See Hayles (1999) for a discussion of this origin—a discussion which, notwithstanding its quality, does not highlight the transformation's Western roots or the global cultural dangers of its contemporary neoliberal, neocolonial matrix.

14 See Kaufmann (1979: 63) for a description of Kino-Eye's aspirations to "engineer" a social program circa mid 1920s: ". . . we felt that we were intellectual engineers, that we were constructing thought out of figurative material."

15 For examples of Vertov's use of military metaphors such as "reconnaissance" "scout" and his "military rule: gauging by sight, speed, attack" see Vertov's 1926 manifesto, "Kino-Eye" (1984: 69, 75, 72). There is a parallel to be explored here between Vertov's project and the militarization of perception as described by Paul Virilio (1989).

16 Michelson (1984: l), Petrić (1987: viii). See, for example, Perry Bard's internet-based appropriation of *The Man with a Movie Camera,* entitled *Man With a Movie Camera: The Global Remake*, at http://dziga.perrybard.net, where it is presented in the following terms:

> *Man With a Movie Camera: The Global Remake* is a participatory video shot by people around the world who are invited to record images interpreting the original script of Vertov's *Man With A Movie Camera* and upload them to this site. Software developed specifically for this project archives, sequences and streams the submissions as a film. Anyone can upload footage. When the work streams your contribution becomes part of a worldwide montage, in Vertov's terms the "decoding of life as it is."

By placing the emphasis on the spectator's creativity while limiting it to the shot-based structure of the film (choose a shot to reinterpret) Bard clearly demonstrates her misunderstanding of the film's sociopolitical logic which is directed to transforming the spectator's political and social consciousness as opposed to engaging in a conventional late-twentieth-century interactive and entertainment-based game of producing a parallel data-based and nonlinear version of the film. While contemporary media artists like Manovich and Bard might claim to be engaged in activities linked to new forms of political awareness and transformation, their work promotes a misreading of Vertov's innovations because they fail to understand the new sociopolitical artistic conditions in which they operate. Such is the extent of their failure, which is of a different order of self-consciousness from that which Vertov promoted in his practice and 1929 experimental visual manifesto.

17 For a discussion of Vertov's approach to the art/science synthesis see Michelson (1992).

18 As Vertov argued in "Kino-Eye" (1984: 63): "Musical, theatrical, and film-theatrical representations act, above all, on the viewer's or listener's subconscious, completely circumventing his protesting consciousness."

19 On this topic see Henderson (1998, 1983) and Michelson (1992). See also Vertov's references (1984: 87) to an experimental scientific methodology in "From Kino-Eye to Radio-Eye" (1929) and the Theory of Relativity in "We: Variant of a Manifesto" (1922), "The Birth of Kino-Eye" (1924), "On the Eleventh Year" (1926), "Kinopravda" (1934) (1984: 9, 41, 78, 131). For Vertov, the Theory of Relativity was an integral element in his Kino-Eye equation as the following sequence from "Kinopravda" suggests: "'kino-eye=cinema-analysis, kino-eye=the theory of intervals, kino-eye=the theory of relativity on screen, etc.'" (131).

20 Equivalent to Petrić's (1987: 74) Prologue in his thematic segmentation of *The Man with a Movie Camera*, Croft and Rose's (1977: 15) Credo and Induction, and Bertrant Sauzier's (1985: 36) Prologue and Segment One.

21 Equivalent to Petrić's (1987: 74–6) Part I and Part II, Croft and Rose's (1977: 15–16) Sections One to Four (inclusive), and Sauzier's (1985: 36–49) Segments Two to Seven (inclusive). My liminal phase model does not include the camera-tripod animation sequence which, contrary to Petric (76), I think should be placed in the rite of reintroduction sequence. Sauzier (49) introduces Vertov's theater finale (Segment Eight) with this animation.

22 Equivalent to Petrić's (1987: 76) Epilogue plus the camera/tripod animation which he placed at the end of Part II, Croft's and Rose's (1977: 16) Coda, and Sections One to Four (inclusive), and Sauzier's Segment Eight to his Epilogue (inclusive).

23 For a classic discussion of dominant symbols see Victor Turner, "Symbols in Ndembu Ritual" (1977: 30–2).

24 In Vertov's words (1984: 19): "The mechanical eye, the camera, rejecting the human eye as crib sheet, gropes its way through the chaos of visual events, letting itself be drawn or repelled by movement, probing, as it goes, the path of its own movement. It experiments, distending time, dissecting movement, or, in contrary fashion, absorbing time within itself, swallowing years, thus schematizing processes of long duration inaccessible to the normal eye."

25 Louis Le Prince is credited with having produced the first single lens films, *Roundhay Garden Scene* and *Leeds Bridge* in 1888 in Leeds, England. For a discussion of the evidence concerning Le Prince's early films see Howells (2006).

26 For discussions of Vertov and montage see Mayne (1975); Lawton (1978); Petrić (1987: 95–107); Michelson (1992). On the dysfunction perverse effects of montage see Williams (1979). On optical montage (Petrić's "phi-effect") see Petrić (1987: 139–48). Petrić (1987: 96) has argued, in the case of Vertov's use of "disruptive-associative montage," that,

> One of Vertov's most dialectical implementations of montage is based on Engels' belief of criticizing and challenging all things, including Marx's own teaching.

Vertov and Svilova used this principle to confront the overt meaning of a sequence by inserting "subversive" shots that function as thematic antitheses which prompt a dialectical grasp of the sequence's message. Eisenstein also considered the dialectical thesis-antithesis conflict as part of his theory of intellectual montage. Drawing from Hegelian dialectics, Eisenstein developed his concept of dialectical montage to "resolve the conflict-juxtaposition of the psychological and intellectual overtones" through "conflicting light vibrations" that affect the viewer on a physiological level and, at the same time, "reveal the dialectical process of the film's passage through a projector." According to this definition, Eisenstein's dialectical conflict is more comparable to Vertov's "Theory of Intervals" (the dialectical juxtaposition of the various movements within the connected shots) than his disruptive-associative montage (the dialectical function of a disruptive shot on a thematic level).

27 See, for example, the following statement by Vertov in "From Kino-Eye to Radio-Eye" (1929): "Every kino-eye production is subject to montage from the moment the theme is chosen until the film's release in its completed form. In other words, it is edited during the entire process of film production" (1984: 88).

28 Vertov, "Kino-Eye" (1984: 71): "This departure from authorship by one person or a group of persons to mass authorship will, in our view, accelerate the destruction of bourgeois, artistic cinema and its attributes: the poser-actor, fairy-tale script, those costly toys—sets, and the director—high priest." Notwithstanding this radical claim, Vertov remained the "*author*-supervisor" of his groundbreaking 1929 experimental film manifesto (my emphasis).

29 In Taylor and Christie (1988: 72) the same sentences are translated, under the title "We. A Version of a Manifesto" as follows: "A work is constructed from phrases just as a phrase is constructed from intervals of movement"; "We must have graphic signs for movement so that we can represent a dynamic exercise on a sheet of paper. WE *are searching for cine-scales*" (emphases in the original).

30 On the question of a collective cybernetic Mind see Bateson (1972). For the background history on Bateson's engagement with cybernetics see Heims (1993) and Hayles (1999, in particular Chapter 3). Bateson has defined "Mind" in the following terms in his introduction to *Steps to an Ecology of Mind* when he said that the collection of essays "combine to propose a new way of thinking about *ideas* and about those aggregates of ideas which I call 'minds.' This way of thinking I call the 'ecology of mind,' or the ecology of ideas" (Bateson 1972a: xv, emphasis in the original). See also "Pathologies of Epistemology," p. 482, in the same volume.

31 The word "robot" appears to have been coined by Čapek's brother Josef Čapek Klíma (2002: 72). It is important to note that Vertov's Kino-Eye-based kinok

model is not a robot like entity. It is a prototype cyborg *system*. Its function was to operate in a particular environment that was not necessarily hostile, unless one considered it to be a prerevolutionary world with all that this implied for a young Soviet society in the making. The environment was omnipresent, yet imperceptible. Vertov's "cyborg" was designed to explore a world governed by the latest theories of the relativistic construction of reality—a world constructed and manufactured by science, technology, and industry. The rules that governed this world were not necessarily visible, as Vertov argued, to the "naked eye." The kinoks were mandated to render it visible and to explore its possibilities.

32 See for example, Perry Bard's *Man With a Movie Camera: The Global Remake*, at http://dziga.perrybard.net.

33 Kino-Eye's quasi-military form of organization and its often intrusive modes of operation pointed to a future based on surveillance and information networks such as envisioned by Paul Virilio (*Pure War*, 115) or Farocki in his *Machine / Eye* trilogy and *Counter-Music* (see Chapter 8). For a comprehensive survey of this topic which includes various categories of artwork see Levin et. al. (2002).

34 Ultimately, for Vertov and other filmmakers and artists of his generation, this context would prove overwhelming, since their experimental—visually and intellectually demanding—work was eventually marginalized in the name of another social agenda: socialist realism. Vertov was, of course, not the first or last casualty in a game of *Realpolitik*. Later politically engaged filmmakers would also find themselves in a similar position. See, for example, Godard's comments in Carroll (1972).

Chapter 2

1 See Michael Snow Fonds 1933–96, gift of Michael Snow, E. P. Taylor Library and Archives, Art Gallery of Ontario, Toronto, Box 47, File 4, "Structural Cinema, Vancouver Art Gallery, 1972, re: *La Région Centrale*." M. Hearn, May 1971, p. 3. A manuscript note at the end of the description states: "You should see the 3-hr. final version (just completed and screen 5/27)—it's a whole different place—." The Michael Snow Fonds, E. P. Taylor Library and Archives, Box and File numbers will henceforth simply be referred to as MSF-TLA, Box #-File #.

2 *La Région Centrale* was edited at the Nova Scotia College of Art and Design (NSCAD), Halifax, during a ten-week visiting artist residency, in the fall of 1970, and the sound track was post-synchronized in Montreal in January 1971. It was after its first screening at NSCAD that Snow decided to delete its "narrative" introduction and make other minor editing changes. The film's first public

screening was at Cinecity, Toronto (Snow, email to the author, July 21, 2010). The deleted introduction contained documentary information of the camera activating machine and exchanges between the film crew based on a scenario Snow had written. For the scenario see "Shooting [La Région Centrale]," 1970, MSF-TLA, 10–7. The introduction, with a new title of "Autour de La Région Centrale," was presented in two programs of "out-takes" from various filmmakers curated by Mark McElhatten and presented in San Francisco and New York (McElhatten, email to the author, August 12, 2010). The only print has subsequently been lost (Snow, email to the author, July 21, 2010). Snow's reasons for deleting this introduction were enumerated in an August 21, 1973 letter to John Locke:

> The title: "La Région Centrale" was the working title. Preparatory work was done in Montreal, final shooting in Northern Quebec with Joyce Wieland, myself and 2 Québecois as crew. I had planned a half hour section at the first of the film which showed the crew, speaking French. Had doubts about it at the time but finished it and finally scrapped it. Actually as you can imagine, though very interesting in itself, it was very damaging to the rest of the film to say the least. (Letter Michael Snow to John Locke, August 21, 1973. Courtesy of John Locke)

3 Michael Snow, letter to Pierre Théberge, March 1971 (National Gallery of Canada, *De La* Curatorial File (2, Installation and Repair History).

4 "Camera activating machine" is the term that Snow has used to describe this specialized piece of equipment. See, for example, 1970 patent application description ("Camera Activating Machine [La Région Centrale]" 1969–71, MSF-TLA, 10–5).

5 MSF-TLA, 10–5 contains various diagrams and notes, copies of existing patents collected for Snow's 1971 patent application by Fetherstonhaugh & Co., Patent and Trade Mark Agents, Montreal, as well as a selection of automatic pan and tilt and motorized zoom lens brochures. The file also contains a sheet of paper, headed by Pierre Abbeloos' name, in Snow's handwriting, of proposed names for the machine ("DESIGN + CONSTRUCTION OF PROGRAMMED CAMERA," "design + construction of CAMERA-MOVER," "camera moving machine," "programmed camera machine timer," "moving camera machine"). The contents of the file, the wording of Snow's detailed description of the camera activating machine, the patent application documents (plus a letter noting that a preliminary British patent was filed on February 10, 1971 with the serial number 04351/71), and the note headed by Abbeloos' name suggest that Snow placed a good deal of emphasis on the distinction between the machine's *conceptual specifications* (what he wanted it to do)—hence its originality as an idea—and its actual design/construction. However, until *De La*'s

purchase by the National Gallery of Canada in 1972 it seems clear that the camera activating machine was considered to be "co-authored." (Snow has constantly acknowledged Abbeloos' basic contribution to *La Région Centrale* and *De La.*) Nevertheless, since the ideas concerning the machine's relationship to camera/lens and tripod were explored in different ways in Snow's earlier films, the question of authorship in this case is fascinating. I will return to the status of the author and its dissimulated nature later in Part II when I discuss *La Région Centrale*'s and *De La*'s posthuman aspects.

6 The first space walk was conducted by the Russian cosmonaut Alexey Leonov on March 18, 1965. Edward H. White conducted the first American space walk on June 3, 1965. See also Michelson (1979: 122):

> *La Région Centrale* was conceived and shot during the two years which followed the most intensive period of America's space program, culminating in the fulfillment of the Apollo Mission, itself the most extensively filmed and televised event in history. Snow's film conveys most powerfully the euphoria of the weightless state; but in a sense that is more intimate and powerful still, it extends and intensifies the traditional concept of vision as the sense through which we know and master the universe.

For a contemporary discussion and argument in favor of adopting a cosmic consciousness see Youngblood (1970: 135–77). Youngblood claimed, for example, "Man no longer is earthbound. We move now in sidereal time. We must expand our horizons beyond the point of infinity. We must move from oceanic consciousness to cosmic consciousness" (135–6). Indeed, he argued, "In addition to a radical reassessment of inner space, the new age is characterized by the wholesale obsolescence of man's historical view of outer space" (137). For Alan Watts (1965: 55), "The individual is not by any means what is contained inside a given envelope of skin. The individual organism is the particular and unique focal point of a network of relations which is ultimately a 'whole series'—I suppose that means the whole cosmos." On "drug-related pleasure" and film experience see Snow (1982–3: 42).

7 For Snow's reference to a lunar landscape see Michael Snow, Landscape (Earth), typescript, p. 2 ("La Région Centrale Original Outline, Application, etc." 1969–70, TLA, 10–4), especially the comment "Underlying the whole endeavor will be the feeling of applying remote moon exploration techniques to the earth." See also the 1970–1 brochure on the Montreal Planetarium in "Background information for 'La Région Centrale' project" 1964–70 (TLA, 11–1).

8 For examples of these environments see Youngblood, *Expanded Cinema* (1970). Snow bought and read *Expanded Cinema* when it was published in 1970 (email to the author, August 17, 2010).

9 For a contemporary anthology devoted to this Pavilion see Klüver et al. (1972). The final chapter of Youngblood's *Expanded Cinema* refers to the Pavilion project where the pavilion's spherical mirror is interpreted as a "glimpse of the future of expanded cinema." For Youngblood, its ability to create "real images without laser light or hardware of any kind . . . 'exposed' a world of expanded cinema in its widest and most profound significance" (1972: 416, 417). Snow was certainly familiar with E.A.T's work, not only through Youngblood's book, but also because he noted, in his initial proposal, in connection with the problem of the machine control of his film's camera movements, that he had ". . . made tentative enquiries at Experiments in Art and Technology an organization here in New York speciallizing [sic.] in such technical problems" ("La Région Centrale Original Outline, Application, etc." 1969–70, MSF-TLA, 10–4, Landscape (Earth), typescript, p. 4).

10 See also the introductory comments to this paragraph: Most of my films accept the traditional theatre situation. Audience here, screen there. It makes concentration and contemplation possible. We're two sided and we fold. Truly three dimensional pieces can only be done with sound and I did a sound piece at Expo '67 called *Sense Solo* that completely wrapped that up as far as I'm concerned. Multi-screen things usually involve such vague optical direction that they're often a kind of therapeutical Impressionism. (Snow 1971: 47)

11 Ainsley Walton, Assistant Conservator, National Gallery of Canada (email to the author, July 16, 2010).

12 See, for example, Experiments in Art and Technology's multidisciplinary composition and activities. See also *Nine Evenings: Theatre and Engineering*, a series of performances implicating dance, film, music, theater at the New York 69th Regiment Armory between the 13th and 23rd of October 1966. The event was organized by Robert Rauschenberg and Billy Klüver and is considered to be an immediate forerunner of E. A. T.'s interdisciplinary activities. The ten artists included John Cage, Lucinda Childs, Öyvind Fahlström, Alex Hay, Deborah Hay, Steve Paxton, Yvonne Rainer, Robert Rauschenberg, David Tudor, and Robert Whitman. The artists' projects implicated the design and technical participation of 30 engineers and scientists from Bell Telephone Laboratories. For a sense of E. A. T.'s ambitions as reflected in its capacity to marshal interdisciplinary resources see Klüver et al. (1972). On Nine Evenings see Morris (2006).

13 For the classic discussion of the parasite's activities see Serres (1982). In Snow's case, the parasite's presence took the form of budgetary problems, technical limitations, calculated and spontaneous improvisation.

14 For *La Région Centrale*'s initial theatrical context, see, for example, its deleted pseudo-documentary introductory narrative fiction. Snow recorded a narrative sequence with the film crew in which the camera activating machine was demonstrated on the last day of filming after it had snowed, and it was included in

the first version of *La Région Centrale*. It was later cut from the film. The scenario for this scene is contained in MSF-TLA, 10–7, "Shooting (*La Région Centrale*)" 1970. A film crew and its reflexive/didactic narrative functions in *La Région Centrale* echo the cameraman's presence and activities in *The Man with a Movie Camera*.

15 Snow commented,

> I had been working with camera movement in enclosed cubic spaces, that is rooms. I started to consider the possibilities of an open relatively unbounded space as image source. Paysage. Because of what I had learned from the previous films I wanted to try to remove the camera further from the viewer of the film's subconscious sense of the camera as a stand-in or equivalent for a human being. This is exemplified by the general height and construction of tripods which move most comfortably, as do our necks, in horizontal moves. Vertical pans in a complete circuit are never done (although I now know of a very early one by Abel Gance). A completely circular vertical pan is quite mysterious and definitely makes the move feel independent of a body. (MSF-TLA, 48–1, "Recontres Internationales, Paris, 1990; Drafts of lecture on 'La Région Centrale' and 'De La.'")

The discussion is from what appears to be a second draft of Snow's lecture. The first one contains minor differences and includes the following sentence: "They of course eradicate the sense of the camera being the eyes of the body" that appears to have been replaced by "A completely circular vertical pan is quite mysterious and definitely makes the move feel independent of a body." If the camera activating machine was constructed in such a way as to exploit a new set of unnamed camera movements, its height nevertheless corresponded to that of a human being.

16 *The Concise Oxford Dictionary* notes that word "tripod" has roots in Greek mythology and the bronze alter at Delphi where a priestess could function as an oracle. It is certainly interesting to conceive of Snow's "vision machine" and its programmer/controller functioning in a similar way especially in light of its cosmic aspirations.

17 See also Michael Snow, letter to Pierre Théberge, March 1971 (National Gallery of Canada, *De La* Curatorial File (2, Installation and Repair History)).

Chapter 3

1 See, for example, the reviews in MSF-TLA, 10–3, "Pesaro Clipping Originals [La Région Centrale Reviews]," 1972.

2 Snow went on to note that his audience had grown over the past three years and he pointed out that his films were well received in universities ". . . where they are often shown . . . " and where he also sometimes lectured. He concluded, "there is a potentially huge market for the kind of pure cinema which I am attempting to make." The university was at this time a primary host for the reception of experimental film. Alternative venues such as the Anthology Film Archives and the London Filmmaker's Co-op were professionally oriented.

3 Snow's comment on looking into the camera at the beginning of each roll is contained in an email to the author, July 27, 2010: ". . . once we started the machine's movements, we couldn't see through the camera (to see what it was shooting). We only looked through the camera 'once' at the start of each reel."

4 On the use of numerals in *The Man with a Movie Camera*'s see Feldman (1979: 99), Petrić (1987: 76*) .

5 Snow has noted that he wrote a score and some sequences were "composed on the spot," but that the sound track (which would have been based on the reel to reel tapes used to communicate instructions for the original camera movements) was produced after the film was edited and it was "post-synched, imitating what the planned-for sound would've been" (emails to the author, February 14 and 12, 2007). Snow has also noted that "The idea was to make reel to reel tapes that played a system of beeps of different pitches and timings to the machine which in turn translated those instructions to the movements that were asked for. 1970 is very much pre-computer. He [Abbeloos] built this gadget and it worked but unfortunately we had run out-of-time. We had to go ahead and shoot, had to scrap the sound instruction idea" (email to the author, February 12, 2007). In another email Snow notes that ". . . it would have taken months to transfer the 'score' to sound tapes, and it would have diminished the possibilities of learning while shooting" (email to the author, July 27, 2010). Thus while Snow's film project was promoted as the product of a script-based automatic filmmaking process, *La Région Centrale* fell short of achieving the project's radical objectives because of time constraints and technical limitations.

6 From this viewpoint, the proposal was therefore developed within the parameters set out by ←——→ (*Back and Forth*) and *Wavelength*.

7 See also Snow's comments in his statement for *La Région Centrale*'s screening at Harvard in 1973 (MSF-TLA, 9–7, "Earth" [La Région Centrale] 1969–72). Drafts for this statement are contained in MSF-TLA, 10–3, "Pesaro Clipping originals [La Région Centrale Reviews]" 1972.

8 As Snow noted, "After one has seen the landscape scene and characters in a very realistic way they can be shot in a more abstract way and one is still aware of the material being used" (MSF-TLA, 10–4, Landscape (Earth), 3).

9 See, for example, Antonioni's *Red Desert* (1964), *Zabriskie Point* (1970), Godard's *Pierrot le Fou* (1965), or Jean-Pierre Melville's *Le Samouraï* (1967). See also, among others, Dennis Hopper's *Easy Rider* (1969) and Bob Rafelson's *Five Easy Pieces* (1971).

10 For a discussion of the artistic/experimental uses of television in the 1960s/early 1970s see Youngblood (1970), Part 5, "Television as a Creative Medium." Youngblood proposes the term *videosphere* ". . . to indicate the vast scope and influence of television on a global scale in many simultaneous fields of sense-extension."

> Like the computer, television is a powerful extension of man's central nervous system. Just as the human nervous system is the analogue of the brain, television in symbiosis with the computer becomes the analogue of the total brain of world man. It extends our vision to the farthest star and the bottom of the sea. It allows us to see ourselves and, through fiber optics, to see inside ourselves. The videosphere transcends telepathy. (1970: 260)

For a brief contemporary analysis of the cultural and theoretical backgrounds to Youngblood's theory of the videosphere see McLuhan (1964) chapter 31, "Television: The Timid Giant."

11 This is not to say that Snow was not politically active, or that he was politically naïve, but the nature of his visual activity was limited, for the most part, to the art world. For example, it might take a prophetic "ecological," countercultural form as in the case of his April 1969 proposal for "Landscape (Earth)," to be eventually funneled through a film project. Or it could be limited to questions of cinema and its cultural value in the case of a jointly signed open letter (with Ken Jacobs and Hollis Frampton) addressed to the Public Hearings Committee, Art Workers' Coalition, dated the 10th of April 1969. The letter was a plea for the Museum of Modern Art to act as "an impersonal public repository where our most permanent work will be maintained in trust for the whole people, to teach, to move, and to delight them: because we believe that art belongs to the whole people" (Art Workers Coalition 1969: 26–7). Note in this connection that the proposal for "Landscape (Earth)" was also written in April, 1969. The question of the political dimensions of "awareness" and the distinction between an active and passive approach to social change can be further understood when one compares the work of Snow to that of Les Levine or N. E. Thing Co. Although the latter two were not experimental filmmakers who were allied to a like-minded community in the way Snow was, they were equally polyvalent and media sensitive. For a discussion of N. E. Thing Co.'s seminal Environmental exhibition at the National Gallery of Canada, June 4–July 6, 1969 see Tomas (2010). Gene Youngblood's *Expanded*

Cinema (1970) is the primary contemporary source for information on the relationship between expanded consciousness, experimental film, and immersive media works. Youngblood (1970: 339–40) also discusses two of Levine's "closed-circuit teledynamic systems," *Iris* (1968) and *Contact: A Cybernetic Sculpture* (1969).

12 The major groundbreaking exhibitions of the period in which *La Région Centrale* was conceived and produced, such as *When Attitude Becomes Form: Live in Your Head (1969)* or *Documenta 5* (1972) reflected a distinct countercultural ethos as opposed to a classically revolutionary one.

13 McLuhan discusses the functions and role of artists in general on p. ix of the Introduction to the Second Edition of *Understanding Media*, and on pp. 62, 70–2. McLuhan also provided a suitably "expanded" definition of the artist as "the man in any field, scientific or humanistic, who grasps the implications of his actions and of new knowledge in his own time. He is the man of integral awareness" (71).

14 See McLuhan (1964: 56) for a discussion of numbness, its negative and positive relationships to electric technologies and technology's function as extensions of physical bodies. The discussion ends with the following statement: "In the electric age we wear all mankind as our skin."

15 It is interesting to compare these reactions to early reactions to *The Man with a Movie Camera*. See, for example, Tsivian (2004: 321–76, 359–60, 363).

16 Shipman's and Ziobro's comments were important enough to be published, with those of Tom Urquhart in his role of projectionist, in the catalogue for the 1972 Vancouver Art Gallery *Form and Structure in Recent Film* exhibition. They were accompanied by Snow's own observations and acknowledgments entitled, punningly, "Final Real" in the section of the catalogue devoted to *La Région Centrale*. See also Cowan (1972) for another, similar, reaction to Snow's film.

Chapter 4

1 Locke's background was in analytical philosophy and the philosophy of language and aesthetics. As a result of his interest in film, he enrolled in the newly formed graduate program in Cinema Studies at New York University in 1968. At the time, the program's teaching staff included Annette Michelson, William Everson, Jay Leyda, Andrew Sarris, and Lewis Jacobs. I am grateful to Locke for discussing the background to his article with me and sharing archival material.

2 See, for example, Locke's comments on these questions: "If you see this film understanding the radical nature of its camera movement, then new perceptual categories can be introduced into the organization of your experience" (1973a: 67).

3 Locke (1973a: 69) had mentioned *Wavelength* (1966–7), *Standard Time* (1967) and ←——→ (1968–9), as well as the still-image-based films *One Second in Montreal* (1969) and *Side Seat Paintings Slides Sound Film* (1970).

4 See also Snow's comments on the uniqueness of the camera activating machine's capacity to produce vertical pans in a 1990 lecture on *La Région Centrale* and *De La* (MSF-TLA, 48–1, "Recontres Internationales, Paris, 1990; Drafts of lecture on 'La Région Centrale' and 'De La'"). While Lock's observations were correct when considered from the viewpoint of the machine's capacity to produce nonhuman machine-like movements, and therefore nonhuman viewing possibilities, he did not take into consideration the camera mechanism's human scale, or its anthropomorphic form, with arm-like structures linked to a tubular torso. One of these arms supported the camera and was capable of 360° rotation; and, therefore, it operated like a mechanized human wrist. Moreover, Locke did not mention the fact that the camera movements were choreographed by Snow and that they were transmitted to the camera via a "program" that he wrote, and that he had also improvised some of its movements. However, Locke's omissions were no doubt based on his objective of rendering the film intelligible to an "uninitiated" audience: "People who never read anything should be able to understand from looking at the layout and length [of his articles] that Snow is a very special artist" (Locke to Michelson, July 9, 1973, courtesy of John Locke). Hence his focus on reception as opposed to production, as the following remark also indicates: "I could tell about how the film was made, but this would spoil one of the pleasures of viewing it for the first time. Doing so would be like giving away the end of a Hitchcock film." This focus is confirmed by the following comment, as Locke continued to facilitate a reader's assimilation of a unique, first-hand film experience: "As you watch the image of the landscape on the screen, the mechanism which produced that image will be revealed by its own shadow image on the screen. The camera mechanism, a moving light and shadow recording device, reveals itself through its own moving shadow" (1973a: 67). (In his May 27, 1971 post-screening notes, Locke had noted that "at one point the camera dwelled on its shadow; this had been seen before but it was only at this point late in the film (2/3 or 4/5 through) that the nature of the tripod and the absence of an operator became apparent" (May 27, 1971 post-screening notes, 3, courtesy of John Locke).) Locke's description was therefore clearly rooted in an analysis of the film image and its reception, as opposed to the analysis of its conditions and mode of production. It is important to keep this in mind when discussing the apparent limitations in his groundbreaking analysis.

5 See also Locke (1973a: 68, 69). For a different approach to this question see Michelson (1979: 116), where she clearly situates the work of a generation of experimental filmmakers in the context of Vertov's contributions to a camera-based

film language and its repertoire of visual effects, albeit in fleeting manner. While Michelson's position does not contradict Locke's arguments about the uniqueness of *La Région Centrale*'s "empty space pans" and the problem of "pure frame movement," it does provide another point of view on the film's originality that specifically links it with Vertov's legacy. However, as in Locke's case, she does not deal with Kino-Eye's social organization or its system of observation/manufacture.

6 Locke (1973b: 72n2) notes 16 sections and Cornwall (1980: 111) 17 sections. Sitney (1979: 384) notes 16 sections. I counted 18 or 19 depending on where one considers the film to end (preliminary frame count/analysis conducted in September 2012).

7 See Michelson (1979), Simon (1979: 97) and his interesting observation that "Because of the total circularity in the treatment of the space, certain distinctions inherent in conventional camera vantage points such as 'in front of' or 'behind' are totally obliterated" (98).

8 See Michelson's (1979: 122) cursory remarks about the connection between *La Région Centrale* and the American space program. See also Cowan (1972: 11) for an early discussion of Snow's film and earth, as opposed to moon, exploration: "I felt as if I had just arrived on earth from a foreign world, and was exploring it for the first time. (I wish someone would take Mike Snow to the moon and have him do the same film there.)"

9 As noted in Chapter 2, note 6, the first space walk was conducted by the Russian cosmonaut Alexey Leonov on March 18, 1965. Edward H. White conducted the first American space walk on June 3, 1965. See also the unidentified NASA photograph reproduced in Michelson (1979: 122).

10 See also Simon's (1979: 99) comments:

> Rather than perceiving frame or camera movement.. . ., we perceive the moon seeming to pass through what appears to be a static frame. In effect, the moon performs a little dance movement as it seems to enter and pass through the frame in different directions.

Cornwell (1980: 115) provided a straightforward description but noted, in passing, that eventually the moon's "circling pattern is elongated to an oval one, and the moon leaves a comet-path afterimage."

11 For an early example of this kind of edge frame exploration and movement around a monochrome surface see Snow's 1960 painting *Lac Clair*. Simon mentioned the painting in relation to a Canadian abstract-based landscape tradition in his 1979 article on Snow (pp. 93–4) but did not discuss its edge frame strategies in relation to *La Région Centrale*. Michelson (1971) also referred to the painting, but only in relation to Snow's treatment of figure-ground relationships. However, the structure of the painting invites an active circular clockwise/anti-clockwise reading of the painting's visual limits. See also *Authorization*, 1969 where there is a complex

play between media, edges, and surfaces. The work is closely related to William Anastasi's *Nine Polaroid Portraits of a Mirror* (1967) but is less literal in its attitude toward the Polaroid/mirror relationship it presents.

12 On "transcultural spaces" and their production in the cases of intercultural and media-based contact spaces, see Tomas (1996).

13 See also Simon's (1979: 99–100) observations and also Cornwell's (1980: 116) comments.

14 The Xs function not only as places of rest for the eye during the unfolding film's presentation, they also refer to the screen/lens' central point and therefore to the same "place" as the movie camera's closing iris diaphragm does in *The Man with a Movie Camera*, as it rapidly cuts off light's pathway to a photosensitive surface on the one hand, and the cinema screen on the other hand, thereby denying an image its photochemical conditions of existence or plunging the cinema into darkness.Although the Xs functioned as resting places, they were also endowed with a certain structural ambiguity. For example, Locke, noted in his post screening notes that "I didn't understand the interval of the X marks; why were they spaced as they were; were they at the end of each taking sequence?" (John Locke post screening viewing notes, May 27, 1971, 2, courtesy of John Locke).

15 Snow email to the author, July 27, 2010. See also email to the author, August 30, 2010: ". . . the final sound was electronic and was suggested by the beeps of the system of instructing the machine with sound tapes (that we finally did not use)."

16 See also the following recent description of Snow's compositional process: "In a sense all of the camera motion was 'improvised.' My 'score' was an attempt to note all the combinations of this vertical with that horizontal motion and to consider the movements at different speeds. I didn't so much imagine the results on the screen of these movements but said to myself, let's see what the results will be if this movement at slow is combined with another movement fast. E.g., when we were shooting the film I kept thinking of other moves that I hadn't previously considered, and we tried some of them. It was experimental (!)" (email to the author, August 17, 2010).

17 In contrast to Locke, Simon and Cornwell do not analyze *La Région Centrale*'s sound track, an omission that limits their analyses. This is also the case with Michelson's 1979 article "About Snow." Her discussion of the *La Région Centrale*'s links to space exploration and the transcendental subject, in relation to Snow's comments that in *La Région Centrale* "it is as if you were the cameraman," only makes sense if the sound track is excluded from consideration (1979: 120–3, 123). Once the sound track is factored into an analysis of the film, the problem of communication, control, and authorial presence surfaces to complicate, if not to displace that question of the transcendental subject.

18 See also Locke's comments on the parallel between the sound track's structure and Alban Berg's *Three Pieces for Orchestra*, which in his words "begins with noises, makes a gradual transition to music, and returns to noises at the conclusion." Locke concludes by reiterating the fact that "the tones form (have the form of) a musical sound track" (1973b: 67). Snow has also recently pointed out, in connection with *La Région Centrale*'s score:

> It was difficult to find a way to notate what I tried to imagine. I'd never seen most of the movements that were possible with the machine. I didn't have time to try any of the possibilities, so it was all definitely "experimental" based on what I could imagine and in the "score" find ways to "picture."
>
> I attempted to find a "development" by making the score. I thought of certain movements being presented in certain ways, then perhaps an hour later to have such movements return but faster, and aimed at other places in the scene, for example. While I never thought of the picture as being eye music I did think "symphonically" about it.
>
> For example, The St John Passion by Bach opens slowly with a gradual raising of instrumental vistas that suggest the gradual revealing of a vista . . . (email to the author, July 21, 2010).

19 For an explanation of Quindar Tones see "Quindar Tones," *Apollo Lunar Surface Journal*, www.hq.nasa.gov/office/pao/History/alsj/quindar.html, consulted 7/8/10.

20 Vertov discussed sound a number of times. See, for example, "The Birth of Kino-Eye" (1924) and "From Kino-Eye to Radio-Eye" (1929) in (Vertov 1984: 40–2, 85–92).

21 As Locke declared, "You will see the brilliance coming from its being so radically innovative as to go beyond existing categories of visual and aural description for films, and yet being formed in a way that relates it to older styles in film history" (1973b: 72).

22 See MSF-TLA, 10–5 for details and correspondence concerning Snow's patent application.

Chapter 5

1 The information presented in this analysis was based on a provisional frame count/analysis conducted in September 2012.

2 Frame count/analysis conducted in September 2012.

3 Michael Snow, email to the author, July 27, 2010.

4 Snow, email to the author, July 27, 2010.

5 Snow, email to the author, July 27, 2010.

6 "The Cyborg deliberately incorporates exogenous components extending the self-regulatory control function of the organism in order to adapt it to new environments" (Clynes and Kline 1960: 27).

7 Snow was aware of the complex projector-based visual experiences generated by planetariums as is suggested by the 1970–1 Montreal Dow Planetarium pamphlet that can be found in MSF-TLA, 11–1 "Background information for 'La Région Centrale' project" 1964–70.

8 Fuller used the term "worldaround" (15) in relation to the "infinitely-extended lateral plane" (20) or "up-and-down make-believe flat world" (18) view of humanity's place on earth and in the Universe. See, for example, Fuller (1970: 15–20).

9 It is therefore of more than passing interest to note that Snow read *Expanded Cinema* when it came out in 1970 (Snow, email to the author, August 17, 2010, see also Youngblood's April 9, 1971 letter to Snow (MSF-TLA, 47–4, "Structural Cinema, Vancouver Art Gallery, 1972, re: *La Région Centrale*." Letter from Gene Youngblood to Michael Snow, April 9, 1971)). Although the book's publication did not predate Snow's 1969 proposal, the concept of an expanded cinema was already built into many of the film and artworks of the mid- to late-1960s, including Snow's own films. See, for example, Youngblood (1970) and Ball et al. (2011) for a recent overview to the present.

10 Jordon Belson (1926–2011) was an American abstract experimental filmmaker who produced some early immersive environments with Henry Jacobs between 1957–9. He also produced a series of cosmically oriented experimental films in the 1960s (Youngblood 1970: 157–77; Sitney 1979: 262–74). See also Cindy Keefer, Jordan Belson, Cosmic Cinema, and the San Francisco Museum of Art, http://blog.sfmoma.org/2010/10/jordan-belson/ (accessed 3/1/13), and Keefer (2008).

11 See also Renan (1967), in particular chapter 6 for an overview of expanded cinema. Lord et al. (2008) provide a more recent overview.

12 Snow has defined these movements as follows:

> My references to "inner ear" were about how images can affect one's sense of balance. People have fainted watching *Back and Forth* and *La Region Centrale*. The depicted (fictional) switching of up and down can effect one's sense of gravity and cause dizzyness." (email to the author 10/19/12)

13 See also Michelson's (1971) comments on the transcendental subject or Cornwell's (1980: 118, 121) observations that "The Camera 'does' what it is scored to 'see,' but its sight is not bound by gravity," and "*La Région Centrale* . . . defies gravity." See also Sitney (1979: 385). See also Deleuze's description of *La Région Centrale* as a film that ". . . does not raise perception to the universal variation of a raw and savage matter without also extracting from it a space without reference points where the ground and the sky, the horizontal and the vertical, interchange.

Nothingness itself is diverted towards that which comes out of it or falls back on it, the genetic element, the fresh or vanishing perception, which potentialises a space by retaining only the shadow or the account of human events" (1986: 122).

14 For Michelson, *La Région Centrale* was complex and rich enough to deploy, for example, some of the most sophisticated intellectual tools of the day, such as Baudry's theory of the cultural determinism of the apparatus, in her analysis of the film thus also introducing her readers to their analytic functions. Later theorists and film analysts would also adopt similar strategies in coming to terms with Snow's film, thereby creating potential proto rite of separation feedback loops between readers, authors, and their object of analysis (see, for example, Elder 1989: 395–9; Kellman 2002: 112–29). However, since these commentators did not adopt the overt pedagogic stance that someone like Locke had implemented in his 1973 articles, a reader's relationship to Snow's film was not necessarily framed by the same basic "educational" objectives when faced with a new and perhaps unprecedented film language. By the time Elder and Kellman had discussed *La Région Centrale* in 1989 and 2002 its historical and critical status was well established. New viewpoints tended, therefore, to be developed in relation to an existing and sophisticated academic history of film criticism. Of course this is also the context within which this book was written. For an early alternative viewpoint on speculative disciplinary knowledge and Snow's films ("Philosophical cinema? Can there be such a thing?") see Mekas (1972).

15 *The Man with a Movie Camera* provides an embryonic deictic viewing experience through its re-presentation of the audience at the beginning and end of the film where the "I" oscillates according to a double off/on screen presence. But this experience operates at the level of film representation and not at a visceral level of experience as in the case of *La Région Centrale*.

Chapter 6

1 "What the machine looked like was at no time of any interest to me. That it should function in the way imagined was what was required" (MSF-TLA, 48–1, "Recontres Internationales, Paris, 1990; Drafts of lecture on '*La Région Centrale*' and '*De La*,'" n.p.).

2 Michael Snow interview with Pierre Théberge, St. Éleuthère, Quebec, 1972, quoted in Snow (1986: 6).

3 MSF-TLA, 48–1, "Recontres Internationales, Paris, 1990; Drafts of lecture on 'La Région Centrale' and 'De La,'" n.p. Snow has also described it as "a 3-dimensional, sculptural, kinetic installation made for an art gallery space." Snow, email to the author, April 23, 2007.

4 Snow has noted that *De La*'s camera activating machine was programmed to produce an "(almost) infinite variety to the views." Email to the author, February 12, 2007.

5 Snow also credited Abbeloos with having "some beautiful ideas about how to build and program the machinery" in a draft letter, dated September 1, 1969 (MSF-TLA, 9–7 "Earth [La Région Centrale] 1969–72" Letter from Snow to G. C. Adams, September 1, 1969). Moreover, as this letter suggests, the camera activating machine's operational parameters and logic had been clearly conceptualized by this time: "We're hoping to pre record all the movments [sic.] as sound impulse on ¼″ tape, the playback will activate 3 motors which will move the camera in any of the 3d movements composed. Its [sic.] going to be incredible. Remote control."

6 See also the 1972 Koller/Snow interview (Koller 1972). As the following response to the question of influences suggests, Snow was thinking about a mechanism that was capable of executing the movements he envisaged and Abbeloos found the technical solutions necessary to build the final machine:

> Before I met Pierre Abbeloos I had spent a year occasionally looking into ways that the movements of the camera which I envisioned could be mechanically controlled. I had ideas and had made drawings of possible swiveling arms which Abbeloos and I discussed in our first meetings. Then, he solved how to actually make such a machine.
>
> I looked into the pros and cons of patenting the Camera Activating Machine. No other designs were imitated in the design of the *LRC* machine. It was my conception and Abbeloos' solutions to the physical and operational problems. He figured out how the machine could operate and he (having metal lathes in his home shop) built the machine.
>
> The sheet of notes you found might have influenced Abbeloos but I doubt it. He found his own solution to the requirements as I expressed them to him.
>
> It would be "inaccurate" to say that the info on these brochures influenced Abbeloos. It would be more accurate to say that they influenced me by demonstrating that there were related apparatuses in existence but none of them would do the 360° moves that I hoped for. Email to the author, 19/10/12.

7 Snow has recently described the complex authorial process involved in the camera activating machine in the following terms: "The machine had to be modified to be used electronically, joining the machine to the four monitors on four bases is part of the work and *De La* was completely my idea. Since the machine built by Abbeloos is the obvious centerpiece of the work it seemed that he should be credited with authorship. And we did that. But it's a bit like the way the name of the director (by Alfred Hitchcock!) can be 'brighter' than other contributions to

a narrative film and *De La* has more and more been described as by me. There has never been a decision made on my part to not give credit to Pierre Abbeloos, but people do tend to abbreviate. It was/is one of the first video installations. The issues were discussed at the time by Abbeloos, myself and Pierre Théberge, the Nat. Gallery curator who made *De La* possible, and we decided that he (Abbeloos), should be listed as one of the makers of the work." Email to the author, 19/10/12.

8 For a discussion of the modifications to *De La* in order to transform it into a gallery-based sculptural installation see Pierre Abbeloos, interview with the author, August 17, 2010. In this interview Abbeloos describes the modifications that were necessary for the camera activating machine to function for long periods of time without breaking down, as well as the modifications that were necessary for it to function with a video camera. See also the curatorial and conservation files devoted to *De La* at the National Gallery of Canada which contains extensive documentation on the modifications, including photographs, that were necessary to transform the camera activating machine into a freestanding kinetic sculpture.

9 "By putting our physical bodies inside our extended nervous systems, by means of electric media, we set up a dynamic by which all previous technologies that are mere extensions of hands and feet and teeth and bodily heat-controls—all such extensions of our bodies, including cities—will be translated into information systems. Electromagnetic technology requires utter human docility and quiescence of meditation such as befits an organism that now wears its brain outside its skull and its nerves outside its hide. Man must serve his electric technology with the same servo-mechanistic fidelity with which he served his coracle, his canoe, his typography, and all other extensions of his physical organs. But there is this difference, that previous technologies were partial and fragmentary, and the electric is total and inclusive. An external consensus or conscience is now as necessary as private consciousness. With the new media, however, it is also possible to store and to translate everything; and, as for speed, that is no problem. No further acceleration is possible this side of the light barrier" (McLuhan 1964: 64–5).

10 "The I, the here and the now lie side by side, as the separate conditions for what is called experience, yet their synthesis is no longer called the subject. Conversely, the subject is no longer their synthesis. *I*, *here* and *now* retain the autonomy they have, and have always had, as mere linguistic pointers: they are the deitics of viewer experience" (De Duve 1990: 35, emphases in the original).

11 The National Gallery of Canada, *De La* Curatorial and Conservation files contain photographic documentation of the camera activating machine's modifications.

Chapter 7

1 See MSF-TLA, Box 10–6 "Editing [*La Région Centrale*]" ND, and 10–7 "Shooting [La Région Centrale]" 1970, for examples of Snow's shooting and audio scripts for *La Région Centrale* (see also Figure 5.3) and see Tode et al. (2006: 72–8, 185–8) for examples of *The Man with a Movie Camera*'s "program."
2 See, for example, Snow's observation that "People have fainted watching *Back and Forth* and *La Region Centrale*. The depicted (fictional) switching of up and down can effect one's sense of gravity and cause dizzyness" (email to the author, October 20, 2012).

Chapter 8

1 See, for example, Carrol (1972) for a contemporary interview with this radical group.
2 For a brief outlines concerning the automation of sight from perspective machines to computing technologies see Kemp (1990) and Manovich (1996). See also the following observation by Farocki (1993: 77):

> Today it is already possible, via satellite, to determine what a man on the streets of Baghdad is reading in his newspaper. It will soon be possible to beam through the clouds and then the houses that receive reflections, and transfer them into images. For greater vividness the satellite perspective will be translated into that of the young boy who is cleaning the man's shoes while he reads his newspaper on the Baghdad streets.
>
> The term "author's cinema" touched me, and since then I have been observing the developments in production techniques [Farocki is referring to the rationalization of cinematographic production via the development of electronic movie and television cameras, which have increasingly eclipsed traditional production-oriented labor practices]. I have described here, in short, a very powerful development, which excludes me and shuts me out. My only means of defence is to make films on this topic. I make films about the industrialization of thought.

On the question of women and *The Man with a Movie Camera* see Mayne (1989: 154–83): "Certainly, *Man with a Movie Camera* celebrates an ostensibly new eroticism of the fusion of human perception and the cinematic machine, but one cannot help but remark upon the persistence with which the woman's body remains the object of that perception" (182).

3 On the full range of self-referential associations in *The Man with a Movie Camera* see Petrić (1987: 82–4, 121–8).

4 See, for example, "*Our Path leads through the poetry of machines, from the bungling citizen to the perfect electric man*" in "We: Variant of a Manifesto" (1922), or the general comments in "From Kino-Eye to Radio-Eye" (1929), section IV "On Radio-Eye," in particular the reference to *The Man with a Movie Camera* being constructed as if "moving from kino-eye to radio-eye," in Vertov (1984: 8, emphasis in the original, 91).

5 See also *War at a Distance* (2003); *Prison Images* (2000); *Images of the World and the Inscription of War* (1988). In this chapter I am only considering the single-channel versions of *Eye/Machine I-III* and *Counter-Music.*

6 For succinct statements on Farocki's use of text and his general engagement with writing see Thomas Elsaesser, "Making the World Superfluous: An Interview with Harun Farocki" in Farocki (2004: 179–80, 188). The logic and function of the intertitle is briefly discussed in Farocki, "Cross Influences/Soft Montage" (Farocki 2008). The orchestral accompaniment depicted in *The Man with a Movie Camera*'s initial movie theater sequence points to the presence of sound in connection with the film's public presentation. The importance of this dimension of the film's sensory architecture has also been highlighted by the reconstructed sound tracks that have appeared on recent DVDs. Although I have not explored the role of sound in this film, with the exception of a brief comment in regard to its graphic representation, the question of sound recording and transmission is, as Vertov's frequent references suggest, of paramount importance in the development of the Kino-Eye project. Sound in the form of ambient noise and voiceover commentary is also a key element in Farocki's work. See, for example, his comments in "Making the World Superfluous" (Farocki 2004: 186–7).

7 Although Farocki's work is less tied to new digital developments in film editing, his work, especially in the examples I am discussing, revolves around the question of the sociopolitical status of the new digital image and its systems of production and reproduction. For early comments on the AVID nonlinear editing system see Rembert Hüser, "Nine Minutes in the Yard: A Conversation with Harun Farocki," in Farocki (2004: 301–2).

8 The term "machine vision" is currently used most often in relation to the use of computer-based vision in industry and manufacturing processes. However, it is clear, as Farocki points out, that machine vision has a history that extends to the fifteenth-century development of perspective systems and their mechanical rationalization/automation from the early sixteenth century. He notes in *Images of the World and the Inscription of War* (1988):

> Here, Leonardo depicts the whole earth projected onto the surface. Dürer, again, took measurements of objects. From the study of nature he obtained numbers and rules. The calculating machines of today make pictures out of numbers

and rules. Here Piero della Francesca. Then pictures into measurements. Today measurements into pictures.

Vertov's contribution to this history is two-fold: In terms of the Kino-Eye system of organization/manufacture and of his conception of the kinoks as semi-mechanized units: "Aiding the machine-eye is the kinok-pilot, who not only controls the camera's movements, but entrusts himself to it during experiments in space." Or, in the future, Vertov offers the figure of "the kinok-engineer, with remote control of cameras" in "Kinoks: A Revolution" (1923), Vertov (1984: 19). Oddly enough a contemporary history of machine vision is absent from Hayles (1999), with the exception of a brief discussion, in the context of a description of the Tierra software program for the creation of computer-based life forms, on pp. 228–31.

9 It is at this stage in the history of the image that the question of the extinction of human labor and the visual image are most clearly posed. See, for example, Farocki's comments on the extinction of the image and human labor in "Making the World Superfluous," in Farocki (2004: 184–5). The following comment made in relation to his film *Images of the World and the Inscription of War* also applies to the *Eye/Machine* trilogy and *Counter-Music*: "Most measuring has little use for images anymore.. . . The figures are now the primary material. They calculate the statistics and the numbers, and occasionally they press a button, and there is an image you can see, just to make it a bit more vivid.. . . And I suddenly realised that the human eye, too, is no longer essential to the production process" (184).

10 This system is congruent with Jeremy Bentham's panopticon model. See, for example, Farocki's "Controlling Observation," in Farocki (2004: 292–4).

11 The juxtaposition of *Berlin, Symphony of a Great City* and *The Man with a Movie Camera* raises the important question of the existence of another historical network—of references and influences—between films. Farocki's way of linking the films through themes (such as the train in *Counter-Music*) raises this question and his proposal for a "cinematographic thesaurus" in a joint article with Wolfgang Ernst, "Towards an Archive for Visual Concepts," provides additional information on how this might be achieved (Farocki 2004: 261–86). The concept of a cinematic thesaurus can also be interpreted as an extension and "modernization" of Vertov's thematic/formal approach to montage. Farocki has taken account of the contemporary filmmaker's use of the history of film as a viable, indeed indispensable, "disciplinary" source of information and images on the nature of contemporary society. As Farocki points out, "Ever since video recorders have been available, filmmakers have begun to refer back to film history—it is time for the rise of the lexicon" (280). See also Farocki's comments on *Workers Leaving the Factory* (1995), *The Expression of Hands* (1997), and *Prison Images* (2000) with their references to an anonymous history of film, in the same article. See also Farocki's comments in "Nine Minutes in the Yard," (Farocki 2004: 309–10).

12 For examples of Kino-Eye's rationalized models of organization and film production see "Kino-Eye" (1926), in particular the section, "The Work of Kino-Eye," in (Vertov 1984: 69–70, 71–2), and "On the Organization of a Creative Laboratory" (1936) in the same volume (137–42), in particular 138 with its distinct reference to a "nonstandardized" manufacturing model for filmmaking practice.

13 See, for example, Vertov's (1984: 74–5) ideal method of working which would include quick modes of transportation, lightweight equipment, and a film crew defined in terms of dedicated functions in "Kino-Eye" (1926).

14 For an insight into Farocki's research methods see "Nine Minutes in the Yard," in Farocki (2004: 309–10), and his video installation *Section/Interface* (1995).

15 On Vertov and Intertitles see Kaufman (2004: 324–7).

16 Farocki's use of a binary image presentation structure has attracted the attention of numerous commentators, especially in connection with his installations. See for example Thomas Elsaesser's discussion in the article "Harun Farocki: Filmmaker, Artist, Media Theorist," in Farocki (2004: 23–7); or Christa Blümlinger's comments in "Incisive Divides and Revolving Images: On the Installation SCHNITTSTELLE," in the same volume. Farocki (2008) comments on his choice of this structure of presentation in "Cross Influences/Soft Montage."

17 For Farocki's views on the editing suite see "What an Editing Room Is" in Farocki (2001: 78–85) and also his video installation *Section/Interface* (1995).

18 Although Farocki states that this system of presentation has its origins in video editing technology, the method can also be traced to the organization of information on a computer screen, which is more closely associated with the worlds of text and writing.

19 In "Cross Influences/Soft Montage" (Farocki 2008) Farocki suggests that the structure implied in these viewpoints respatializes the classic filmic strategy of shot/countershot. Insofar as montage uses a similar contrapuntal strategy for different, linear-based antinarrative ends, the subject of a new cinematic counter-practice continues to revolve around the problem of the frame and its methods of display and interaction.

20 The *Eye/Machine* trilogy and *Counter-Music* provide an answer to the question of how to depict contemporary life in a social system that is based on electronic surveillance. For Farocki, the abstract existence of the prison and its workhouses points to the conditions of a new kind of existence, while prison architecture and surveillance systems articulate its underlying logic. If "With the increase in electronic control structures, everyday life will become just as hard to portray and to dramatise as everyday work already is" (Farocki, "Controlling Observation," in (2004: 294)), then the problem of portrayal is resolved to some extent by redirecting the camera toward the control structures themselves.

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